

Message

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**From:** Baptist.Erik@epa.gov [Baptist.Erik@epa.gov]  
**Sent:** 3/13/2019 12:30:48 AM  
**To:** Schwab, Justin [Schwab.Justin@epa.gov]; Bennett, Tate [Bennett.Tate@epa.gov]  
**Subject:** Fwd: Pending Dicamba 24(c)'s  
**Attachments:** Dicamba SLN List; 2019.docx; ATT00001.htm

# Deliberative Process / Ex. 5

Sent from my iPhone

Begin forwarded message:

**From:** "Keller, Kaitlin" <keller.kaitlin@epa.gov>  
**Date:** March 12, 2019 at 1:48:41 PM EDT  
**To:** "Dunn, Alexandra" <dunn.alexandra@epa.gov>, "Beck, Nancy" <Beck.Nancy@epa.gov>, "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>, "Baptist, Erik" <baptist.erik@epa.gov>  
**Subject:** FW: Pending Dicamba 24(c)'s

## Deliberative Process / Ex. 5

**From:** Keller, Kaitlin  
**Sent:** Thursday, March 07, 2019 4:02 PM  
**To:** Erik Baptist (<baptist.erik@epa.gov> <baptist.erik@epa.gov>); Beck, Nancy <Beck.Nancy@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>  
**Subject:** FW: Pending Dicamba 24(c)'s

## Deliberative Process / Ex. 5

Thanks,  
Kaitlin

**From:** Keigwin, Richard  
**Sent:** Thursday, March 07, 2019 6:46 AM  
**To:** Keller, Kaitlin <keller.kaitlin@epa.gov>  
**Cc:** Dinkins, Darlene <Dinkins.Darlene@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Miller, Wynne <Miller.Wynne@epa.gov>  
**Subject:** Pending Dicamba 24(c)'s

## Deliberative Process / Ex. 5





DICAMBA 24(c)s; 2019							
SLN Reg. No.	State Issued Date	Status (EPA Response Date)	EPA Reg. No.	Product Name	Company Name	Active Ingredient	SLN Use
NC180004	11/19/18	Pending (90-days; 2/24/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	NC specific training language for dicamba-tolerant cotton/soybeans
NC180005	11/14/18	Pending (90-days; 2/17/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	NC specific training language for dicamba-tolerant cotton/soybeans
NC180006	11/21/18	Pending (90-days; 2/24/19)	352-913	Dupont Fexapan	Dupont	Diglycolamine salt of dicamba	NC specific training language for dicamba-tolerant cotton/soybeans
IA190001	12/10/18	Pending (90-days; 3/11/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	IA specific training language for dicamba-tolerant soybeans
IA190002	12/10/18	Pending (90-days; 3/11/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	IA specific training language for dicamba-tolerant soybeans
IA190003	12/11/18	Pending (90-days; 3/13/19)	352-913	Dupont Fexapan	Dupont	Diglycolamine salt of dicamba	IA specific training language for dicamba-tolerant soybeans
SD190001	12/7/18	Pending (90-days; 3/17/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	Addition of June 30 cut-off date for dicamba-tolerant soybeans
SD190002	12/7/18	Pending (90-days; 3/17/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	Addition of June 30 cut-off date for dicamba-tolerant soybeans
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MN190001	1/28/19	Pending (90-days; 5/1/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	<ol style="list-style-type: none"> <li>1. CUTOFF DATE: DO NOT apply after June 20, 2019</li> <li>2. Removes temperature cutoff restriction</li> <li>3. Restricted Use Pesticide clarification</li> </ol>
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ND190003	1/28/19	Pending (90-days; 5/1/19)	352-913	Dupont Fexapan	Dupont	BAPMA salt of dicamba	DO NOT apply DuPont FeXapan herbicide Plus VaporGrip Technology later than June 30, 45 days after planting, or after the first bloom (R1 growth phase), whichever comes first.



Message

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**From:** Baptist.Erik@epa.gov [Baptist.Erik@epa.gov]  
**Sent:** 3/7/2019 11:03:45 PM  
**To:** Bennett, Tate [Bennett.Tate@epa.gov]  
**Subject:** Fwd: Pending Dicamba 24(c)'s  
**Attachments:** Dicamba SLN List; 2019.docx; ATT00001.htm

Sent from my iPhone

Begin forwarded message:

**From:** "Keller, Kaitlin" <keller.kaitlin@epa.gov>  
**Date:** March 7, 2019 at 4:01:50 PM EST  
**To:** "Baptist, Erik" <Baptist.Erik@epa.gov>, "Beck, Nancy" <Beck.Nancy@epa.gov>, "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>  
**Subject:** FW: Pending Dicamba 24(c)'s

# Deliberative Process / Ex. 5

Thanks,  
Kaitlin

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**From:** Keigwin, Richard  
**Sent:** Thursday, March 07, 2019 6:46 AM  
**To:** Keller, Kaitlin <keller.kaitlin@epa.gov>  
**Cc:** Dinkins, Darlene <Dinkins.Darlene@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Miller, Wynne <Miller.Wynne@epa.gov>  
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**From:** Keller, Kaitlin [keller.kaitlin@epa.gov]  
**Sent:** 3/12/2019 5:48:41 PM  
**To:** Dunn, Alexandra [dunn.alexandra@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Baptist, Erik [baptist.erik@epa.gov]  
**Subject:** FW: Pending Dicamba 24(c)'s  
**Attachments:** Dicamba SLN List; 2019.docx

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**To:** Erik Baptist (baptist.erik@epa.gov) <baptist.erik@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>  
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**Sent:** Thursday, March 07, 2019 6:46 AM  
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**From:** Bennett, Tate [Bennett.Tate@epa.gov]  
**Sent:** 3/13/2019 2:12:25 AM  
**To:** Baptist, Erik [Baptist.Erik@epa.gov]; Schwab, Justin [Schwab.Justin@epa.gov]  
**Subject:** More Dicamba Lines Drawn – Ohio Ag Net | Ohio's Country Journal

“ It will no doubt cause difficulty for some farmers in certain areas and we are sensitive to that issue but encourage full compliance as per the 24(c) labels,” said Ted Mottaz, Illinois Corn Growers Association president.”

<https://www.ocj.com/2019/03/more-dicamba-lines-drawn/>

## More Dicamba Lines Drawn

Joel Penhorwood

By Pamela Smith  
DTN Crops Technology Editor  
and  
Emily Unglesbee  
DTN Staff Reporter

DECATUR, Ill. (DTN) — Illinois farmers and applicators will join the ranks of those facing additional regulations aimed at limiting off-target movement of dicamba herbicide this summer.

The Illinois Department of Agriculture (IDOA) announced Friday it will require Special Local Needs (SLN) labels, including new restrictions that include a firm calendar cutoff date and additional definitions for sensitive areas, for the use of the herbicide dicamba on soybeans in Illinois for the 2019 growing season.

On Feb. 15, IDOA notified the manufacturers of the three dicamba-containing products approved for over-the-top application to dicamba-tolerant (DT) soybeans that additional application restrictions will be required for the 2019 growing season. The affected formulations of dicamba are Engenia by BASF, XtendiMax with Vapor Grip Technology by Bayer, and FeXapan plus Vapor Grip Technology by DuPont/Corteva.

The EPA reregistered the three dicamba herbicides in October — adding to the already lengthy and complex product labels. However, unprecedented pesticide misuse complaints associated with the technology have caused some states to question if the agency went far enough.

This week, Arkansas also finalized a cutoff date and other additional application precautions beyond the federal dicamba label. Minnesota, South Dakota and North Dakota have made adjustments to the label, while Indiana abandoned its plans for a cutoff date.

Here are more details for each of those states.

## ILLINOIS

The additional restrictions beyond federally-approved labels are:

1. The implementation of a cutoff date of June 30, 2019, for application to dicamba-tolerant soybeans.
2. Prohibiting application when the wind is blowing toward adjacent residential areas.
3. Required consultation of the FieldWatch sensitive crop registry before application, as well as compliance with all associated record-keeping label requirements.
4. Maintaining the label-specified downwind buffer between the last treated row and the nearest downfield edge of any Illinois Nature Preserves Commission site.
5. Recommendation to apply product when the wind is blowing away from sensitive areas, which include but are not limited to bodies of water and non-residential, uncultivated areas that may harbor sensitive plant species.

The intent of these additional restrictions is to reduce the potential for off-target movement of these products, thereby reducing the potential for possible adverse impacts to dicamba-sensitive crops/areas, stated an IDOA news release. The decision to pursue state-specific SLN labels was made in response to the record number of misuse complaints IDOA received during the past two years, the release said.

In 2017, IDOA received 430 total complaints, 246 of which were related to the use of dicamba on soybeans. Those numbers rose to 546 total complaints, including 330 dicamba-related complaints, in calendar year 2018. Prior to the 2017 introduction of these new formulations of dicamba for use on tolerant soybean varieties, total pesticide misuse complaints average 110 per year from 1989 to 2016.

Because of this significant increase in alleged pesticide misuse complaints, IDOA reviewed special needs labels currently in place in other soybean-production states. IDOA also worked with several Illinois stakeholder organizations before making the decision to require state-specific labels for Illinois.

“We now have two years of data showing how dicamba has the potential to drift off target,” said IDOA Acting Director John M. Sullivan. “It’s obvious measures need to be put in place so farmers can continue to effectively use these products, while also protecting surrounding property and crops.”

The Illinois Farm Bureau, Illinois Corn Growers Association and Illinois Fertilizer and Chemical Association presented supporting statements for the additional measures in the news release.

“Illinois Farm Bureau supports the Illinois Department of Agriculture (IDOA) in their administration of pesticide rules that they deem necessary to limit adverse effects to the environment,” said Richard Guebert Jr., Illinois Farm Bureau president. “Dicamba-based products are useful and necessary tools in the fight against problematic weeds, helping farmers to remain productive and profitable. Illinois Farm Bureau will continue to work with IDOA and other partners into the future to find workable solutions for crop protection products.”

Southern Illinois double-crop producers are likely to feel the cutoff date most. However, worries of volatility climb as the calendar date advances to a period of potentially higher temperatures.

“The Illinois Corn Growers Association supports on-label use of crop protection products, along with farmer or applicator adherence to any additional label requirements issued by the Illinois Department of Agriculture. We know that Acting Director Sullivan takes seriously his obligation to protect the interests of many stakeholder groups, along with the preservation of public trust and transparency. We understand how the department came to this conclusion. It will no doubt cause difficulty for some farmers in certain areas and we are sensitive to that issue but encourage full compliance as per the 24(c) labels,” said Ted Mottaz, Illinois Corn Growers Association president.

Also evident in responses was a statement from the Illinois Environmental Council.

“Volatilization and drift of pesticides are environmental issues that can impact our natural areas, water, and soil as well as Illinois’ growing specialty crop industry,” said Jennifer Walling, executive director of the Illinois Environmental Council. “I appreciate the efforts by the Illinois Department of Agriculture and industry stakeholders to reduce drift from dicamba. These rules are a step forward to address these issues. We are looking forward to working with stakeholders to research and monitor the results of the new labels.”

Jean Payne, president of the Illinois Fertilizer and Chemical Association (IFCA), focused on the importance of coexistence in her statement. “This proactive step demonstrates Illinois agriculture’s commitment to stewardship, and IFCA will educate our commercial applicator

members regarding these pesticide label changes to ensure the continued legal and judicious use of this soybean production tool.”

The three product registrants — BASF, Bayer and DuPont/Corteva — have each submitted formal SLN labels for their respective dicamba-containing products to IDOA, which include the additional restrictions noted above. IDOA has submitted the resulting 24(c) registration packages for each product to the U.S. Environmental Protection Agency. The SLN labels will be distributed in addition to the already federally approved labels with all Engenia, XtendiMax and FeXapan products sold for use in the state of Illinois for the 2019 growing season.

## ARKANSAS

Most recently, Arkansas lawmakers approved the state plant board’s proposed May 25 cutoff date for dicamba applications in the state. That proposal was reached after a contentious, 9.5-hour plant board hearing on Feb. 20, during which proponents of dicamba use in the state clashed with specialty crop farmers, organic growers, environmental groups and concerned citizens, who were pushing for a more restrictive April 15 cut-off.

Last year, Arkansas banned in-crop use of dicamba from April 16 to Oct. 31, but still saw roughly 200 complaints of off-target injury. This year, Arkansas growers will be able to make applications to dicamba-tolerant soybeans and cotton until May 25, while observing a half-mile buffer around fields of sensitive row-crop fields and a 1-mile buffer around specialty crops, organic crops and research fields.

Arkansas applicators are also not permitted to tank mix dicamba with glyphosate, given growing university research showing that this practice significantly increases dicamba volatility. See a complete listing of Arkansas’ dicamba rules here:

<https://www.agriculture.arkansas.gov/...>

## INDIANA

The state of Indiana has done a fast reversal on 2019 dicamba regulations in the state. In December 2018, DTN reported that pesticide regulators from the Office of Indiana State Chemist (OISC) were submitting a 24(c) label to EPA with a June 30 cutoff date, based on the recommendations of a work group appointed by the Indiana Pesticide Review Board.

The work group also recommended 1/4- to 1/2-mile downwind buffers for applications near sensitive crops and residential areas. The group believed these additional restrictions could cut dicamba complaints in the state by 50%.



However, after state pesticide regulators met with several agriculture industry groups, including the Indiana Farm Bureau, the Agribusiness Council of Indiana and the Indiana Soybean Alliance, the 24(c) application was abandoned.

“Subsequent consultation with Indiana agricultural leaders has caused OISC to conclude that postponing implementation of any state-specific restrictions may be a prudent concession for 2019,” state regulators wrote in an OISC fact sheet. The ag industry groups urged OISC to prioritize the needs of farmers who were planting dicamba-tolerant technology, given that most of the state’s dicamba complaints in 2017 and 2018 were related to non-DT soybeans, not other sensitive crops and plants, state regulators said.

So, for now, Indiana applicators will face no additional restrictions beyond the federal dicamba labels for XtendiMax, Engenia and FeXapan. See more details here:

<https://www.oisc.purdue.edu/...>

## NORTHERN PLAINS

The Minnesota Department of Agriculture went with a June 20 cutoff date for 2019, using a 24(c) label. While similar to the restrictions in place in Minnesota last year, the new 24(c) for 2019 will not include the 85-degree temperature cutoff that was in place in 2018. See more details here: <https://www.mda.state.mn.us/...>

The South Dakota Department of Agriculture has submitted a 24(c) label to EPA with a June 30 cutoff date, but is still waiting for EPA to approve it, according to Tom Gere, assistant director for the agricultural services division of the agency.

The North Dakota Department of Agriculture also went with a 24(c) label with a June 30 cutoff date for 2019 applications. See more details here: <https://www.nd.gov/...>

A handful of other states are forgoing cutoff dates, but are adding additional uses or requirements, such as in-state training sessions. Growers should be sure to check with their local state department of agriculture for additional state requirements on dicamba use in 2019.

Emily Unglesbee can be reached at [Emily.unglesbee@dtm.com](mailto:Emily.unglesbee@dtm.com)

Follow her on Twitter @Emily\_Unglesbee

Pamela Smith can be reached at [pamela.smith@dtm.com](mailto:pamela.smith@dtm.com)

Follow her on Twitter @PamSmithDTN

(AG/CZ)

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Message

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**From:** Baptist, Erik [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=10FC1B085EE14C6CB61DB378356A1EB9-BAPTIST, ER]  
**Sent:** 3/13/2019 12:27:11 PM  
**To:** Mills, William T. [mills.williamt@epa.gov]  
**Subject:** RE: 24C  
**Attachments:** Dicamba SLN List; 2019.docx

Is this what you're looking for?

**Erik Baptist**

Deputy Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
U.S. Environmental Protection Agency  
1201 Constitution Ave., NW  
Washington, DC 20460  
(202) 564-1689  
[baptist.erik@epa.gov](mailto:baptist.erik@epa.gov)

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**From:** Mills, William T.  
**Sent:** Tuesday, March 12, 2019 4:38 PM  
**To:** Baptist, Erik <Baptist.Erik@epa.gov>  
**Subject:** 24C

Is there a 24C refresher/one pager? Tate asked if a state had applied for one right after we had that meeting today.

Thanks,

Thomas

Thomas Mills  
Deputy Director for Agricultural Outreach  
Office of the Administrator  
U.S. Environmental Protection Agency  
[Washington, DC](#)  
office: [\(202\) 564-6323](#)  
cell: [\(202\) 568-1025](#)

DICAMBA 24(c)s; 2019							
SLN Reg. No.	State Issued Date	Status (EPA Response Date)	EPA Reg. No.	Product Name	Company Name	Active Ingredient	SLN Use
NC180004	11/19/18	Pending (90-days; 2/24/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	NC specific training language for dicamba-tolerant cotton/soybeans
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NC180006	11/21/18	Pending (90-days; 2/24/19)	352-913	Dupont Fexapan	Dupont	Diglycolamine salt of dicamba	NC specific training language for dicamba-tolerant cotton/soybeans
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Message

**From:** Baptist, Erik [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=10FC1B085EE14C6CB61DB378356A1EB9-BAPTIST, ER]  
**Sent:** 3/13/2019 12:30:49 AM  
**To:** Schwab, Justin [Schwab.Justin@epa.gov]; Bennett, Tate [Bennett.Tate@epa.gov]  
**Subject:** Fwd: Pending Dicamba 24(c)'s  
**Attachments:** Dicamba SLN List; 2019.docx; ATT00001.htm

# Deliberative Process / Ex. 5

Sent from my iPhone

Begin forwarded message:

**From:** "Keller, Kaitlin" <keller.kaitlin@epa.gov>  
**Date:** March 12, 2019 at 1:48:41 PM EDT  
**To:** "Dunn, Alexandra" <dunn.alexandra@epa.gov>, "Beck, Nancy" <Beck.Nancy@epa.gov>, "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>, "Baptist, Erik" <baptist.erik@epa.gov>  
**Subject:** FW: Pending Dicamba 24(c)'s

## Deliberative Process / Ex. 5

**From:** Keller, Kaitlin  
**Sent:** Thursday, March 07, 2019 4:02 PM  
**To:** Erik Baptist (baptist.erik@epa.gov) <baptist.erik@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>  
**Subject:** FW: Pending Dicamba 24(c)'s

# Deliberative Process / Ex. 5

Thanks,  
Kaitlin

**From:** Keigwin, Richard  
**Sent:** Thursday, March 07, 2019 6:46 AM  
**To:** Keller, Kaitlin <keller.kaitlin@epa.gov>  
**Cc:** Dinkins, Darlene <Dinkins.Darlene@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Miller, Wynne <Miller.Wynne@epa.gov>  
**Subject:** Pending Dicamba 24(c)'s

# Deliberative Process / Ex. 5





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Message

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**Sent:** 3/7/2019 11:05:01 PM  
**To:** Bennett, Tate [Bennett.Tate@epa.gov]  
**Subject:** Fwd: Pending Dicamba 24(c)'s  
**Attachments:** Dicamba SLN List; 2019.docx; ATT00001.htm

Sent from my iPhone

Begin forwarded message:

**From:** "Keller, Kaitlin" <keller.kaitlin@epa.gov>  
**Date:** March 7, 2019 at 4:01:50 PM EST  
**To:** "Baptist, Erik" <Baptist.Erik@epa.gov>, "Beck, Nancy" <Beck.Nancy@epa.gov>, "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>  
**Subject:** FW: Pending Dicamba 24(c)'s

# Deliberative Process / Ex. 5

Thanks,  
Kaitlin

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**From:** Keigwin, Richard  
**Sent:** Thursday, March 07, 2019 6:46 AM  
**To:** Keller, Kaitlin <keller.kaitlin@epa.gov>  
**Cc:** Dinkins, Darlene <Dinkins.Darlene@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Miller, Wynne <Miller.Wynne@epa.gov>  
**Subject:** Pending Dicamba 24(c)'s

# Deliberative Process / Ex. 5



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Message

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**From:** Jim Rathvon [jrathvon@paleyrothman.com]  
**Sent:** 7/2/2018 6:20:19 PM  
**To:** Keigwin, Richard [Keigwin.Richard@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]  
**CC:** Gebken, Richard [Gebken.Richard@epa.gov]; Maignan, Tawanda [Maignan.Tawanda@epa.gov]; Antoine Puech [antoinepuech@meycorp.com]; Cristen S. Rose [crose@paleyrothman.com]; 47788\_0001 \_ Aglogic Chemical \_ LLC Florida Citrus [{F579377}.PaleyDocs@NDM.paleyrothman.com]  
**Subject:** AgLogic Florida SLN [IWOV-PaleyDocs.FID579377]  
**Attachments:** 3588985\_1.pdf; ATT1.pdf; ATT2.pdf

Dear Mr. Keigwin and Ms. Beck: Attached is a letter on behalf of AgLogic Chemical LLC concerning an issue of great importance to Florida citrus growers and, indirectly, American consumers. Thank you in advance for your attention to this urgent matter.

Respectfully submitted,

Jim Rathvon  
Cristen Rose  
Counsel for AgLogic Chemical LLC

James P. Rathvon  
Attorney At Law  
Bio | Vcard



4800 Hampden Lane | 6th Floor | Bethesda, MD 20814 | 301-951-9342 | [www.paleyrothman.com](http://www.paleyrothman.com)

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July 2, 2018

**BY ELECTRONIC AND OVERNIGHT MAIL**

Rick Keigwin, Director  
Office of Pesticide Programs  
USEPA Headquarters  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N. W.  
Washington, DC 20460-0001  
([keigwin.richard@epa.gov](mailto:keigwin.richard@epa.gov))

Nancy Beck, Deputy Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
USEPA Headquarters  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N. W.  
Washington, DC 20460-0001  
([beck.nancy@epa.gov](mailto:beck.nancy@epa.gov))

Re: Critically Important Pesticide SLN to Help Embattled Florida Citrus Industry

Dear Sir and Madame:

This letter requests your – and the Agency’s – support for a FIFRA Section 24(c) Special Local Need registration (SLN) for AgLogic 15GG, a granular insecticide containing 15% aldicarb, to control Asian citrus psyllid, citrus rust mites, spider mites, aphids and nematodes on Florida citrus. The SLN application was filed with the Florida Department of Agriculture and Consumer Services (FLDACS) on June 1, 2018 by AgLogic Chemical, LLC, the sole U.S. registrant of aldicarb.

The key facts are these:

1. The Florida citrus industry is on “the brink of annihilation” (Dr. Phillip Stansly, Professor of Entomology, U. Fl., 10/16/17 Letter). It has been ravaged by the citrus greening disease (HLB), transmitted by the Asian citrus psyllid (ACP), and there has been an **80% loss** in production of citrus statewide.<sup>1</sup>
2. Florida growers are losing the battle against the spread of citrus greening disease. At best, the current toolbox of chemical treatments only modestly retards the advance of the disease, but does nothing to improve production. As stated by one grower: “Absent better tools citrus growers will be out of business soon!” (Tim Dooley, Vice President and General Manager, Blue Goose Growers, LLC, 10/11/17 Letter). The intensive use of foliar treatments to fight psyllids has also resulted in other pest problems, including the development of resistance as well as spikes in mite, weevil, and aphid populations.

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<sup>1</sup>. At the time HLB was first discovered in 2003-2004, Florida orange production totaled 242 million boxes. In April 2018, the USDA National Agricultural Statistics Service estimated that just 45 million boxes of oranges would be harvested in 2017-2018 – a decrease of 197 million boxes, or 81%. USDA/NASS, Citrus April Forecast 2017-2018 Season (April 10, 2018) *available at*: [https://www.nass.usda.gov/Statistics\\_by\\_State/Florida/Publications/Citrus/Citrus\\_Forecast/2017-18/cit0418.pdf](https://www.nass.usda.gov/Statistics_by_State/Florida/Publications/Citrus/Citrus_Forecast/2017-18/cit0418.pdf).

3. ***The Florida citrus industry – including the largest growers in the state – enthusiastically support an SLN registration for AgLogic 15GG.*** Indeed, several prominent growers have taken the unusual step of submitting both signed affidavits (Attachment 1) and letters (Attachment 2) detailing why they so urgently need aldicarb.<sup>2</sup> As they explain, a unique attribute of aldicarb is that it stimulates tree health and root growth and ***markedly increases fruit size and yield***, precisely what growers need now to stay in business. Aldicarb is also effective against many pests, including psyllids, mites and nematodes, among others. As one grower has testified: “Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.” (John Gose, General Manager, Lykes Bros. Inc.; 5/17/18 Affidavit).
4. Florida citrus growers are familiar with aldicarb because they used the product (under the trade name, TEMIK 15G) with great results for several decades (~1978-2010), until Bayer, the sole registrant, *voluntarily* cancelled the registration and withdrew from the market, pursuant to a well-publicized corporate decision to exit all WHO Class 1 products.
5. FLDACS has advised AgLogic that it will not approve the SLN unless it is assured that EPA will not disapprove it. It is our understanding that EPA has not yet had the opportunity to review the SLN, attached affidavits and other materials demonstrating the Special Local Need for aldicarb. However, we also understand that there have been early indications by staff members in EPA’s OPP that OPP is inclined to ***deny*** the SLN.

We submit that OPP’s current disinclination to approve the SLN is unjustified and contrary to the public interest. The following points may clarify why we believe this:

6. At the time Bayer cancelled its aldicarb registrations, EPA was concerned about possible dietary risks to infants and children from consumption of food and drinking water containing aldicarb residues. For this reason, AgLogic’s subsequently-obtained registration for AgLogic 15GG, which is approved for use on cotton, peanuts and certain other crops, did not include use on citrus.
7. Over the past several years, aldicarb has undergone Registration Review. During this process, AgLogic implemented significant changes to the product label that result in aggregate dietary exposures to aldicarb well below the 2010 EPA Level of Concern. EPA has recently issued an Interim Registration Review Decision concluding that aldicarb may continue to be registered.
8. To assist the Agency in its assessment of aldicarb, including for use on citrus under a Florida SLN, AgLogic commissioned Dr. Beth Mileson, Principal Scientific Consultant, TSG Consulting, to conduct an acute dietary exposure and risk assessment for aldicarb.

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<sup>2</sup> For convenience, each attachment also includes a cover sheet highlighting relevant excerpts from the affidavits and letters, respectively.

This risk assessment was submitted to EPA earlier this year. Dr. Milesen's affidavit (included in Attachment 1) affirms that she conducted the risk assessment using models and methods identical to those used by EPA's risk assessors. The risk assessment demonstrates that 20% of the US citrus crop may be treated with aldicarb and dietary exposures (including food and water) for all sub-populations are well below any level of concern.

In short, there is no scientific basis for EPA to disapprove the SLN due to dietary risk.

\* \* \*

In summary, this SLN is critically important to a Florida citrus industry that desperately needs help. We urge you to take the steps necessary to ensure that OPP makes a full and fair assessment of the SLN, including its substantial benefits to American growers and consumers.

Time is of the essence. Application of AgLogic 15GG must occur during the dry season, which runs from mid-November through April at the latest. Even after the SLN is approved, several additional steps must be taken before applications can occur. Most important, AgLogic must identify applicators that have (or are willing to purchase) the necessary application equipment, and these applicators must be trained to ensure compliance with AgLogic's product stewardship program. Applicators must also petition FLDACS for permission to apply the product. Aldicarb has not been used on citrus since 2011, so considerable lead time is required to restart applications.

In furtherance of the process, AgLogic requests the opportunity to meet with the Agency as soon as possible to discuss the SLN and respond to any questions or concerns OPP may have. Depending on schedule, it is likely that one or more citrus growers and FLDACS officials will attend the meeting as well.

Thank you in advance for your attention to this important matter. Please do not hesitate to contact us if you have any questions or would like to discuss these issues further.

Sincerely,



James P. Rathvon  
Cristen S. Rose  
Counsel for AgLogic Chemical, LLC

Attachments

cc (by email and overnight mail):  
Richard Gebken, OPP  
Tawanda Maignan, OPP  
Antoine Puech, President/CEO of AgLogic

# **ATTACHMENT 1**

## **Affidavits from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida**

The attached 10 sworn affidavits were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the letters of support that were submitted by these researchers and citrus growers in late 2017.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC – 5/21/18**  
(Also see letter of support from Dr. Philip Stansly, dated 10/16/17)

*Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”*

*One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.*

*Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.*

**2. Walter T. Jerkins, President, Premier Citrus LLC – 5/23/18.**  
(Also see letter of support from Walter T. Jerkins, dated 10/11/17)

*Aldicarb is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.*

*Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.*

*The yield response from the use of aldicarb is robust, resulting in a sustained yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.*

*The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity - precisely the effects that are so desperately needed now by the citrus industry.*

**3. John Gose, General Manager, Lykes Bros. Inc – 5/17/18**  
(Also see letter of support from John Gose, dated 10/2/17)

*Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.*

*A serious drawback of foliar insecticides is that they can wipe out pollinators and other "beneficials" (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.*

*In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly higher pounds of solids per box, producing a very positive net economic return.*

*The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc – 4/27/18**  
(Also see letter of support from William Roe, dated 9/28/17)

*Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest*



*management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.*

*This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both - suppress psyllids and protect beneficials during bloom time - because of its systemic mode of action.*

*Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.*

**5. Dave Owens, Director of Chemical Sales, Alico Citrus -- 5/29/18**

(Also see letter of support from Steve Ryan, President, Alico Citrus, dated 10/10/17)

*Alicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides*

*The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.*

*Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 5/17/18**  
(Also see letter of support from Tim Dooley, dated 10/11/17)

*Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.*

*In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.*

*In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC -- 5/xx/18**  
(Also see letter of support from Marvin Kahn, dated 11/3/17)

*Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better - and are healthier - than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.*

*Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.*

*Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.*

**8. Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP -- 5/23/18**  
(Also see letter of support from Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP, dated 10/20/17)

*When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.*

*The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.*

**9. John Barden, Vice President, Barben Fruit Company Inc – 5/30/18**

(Also see letter of support from John Barden, dated 10/13/17)

*The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ACP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.*

*A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.*

*We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficial when we used aldicarb.*

**10. Dr. Beth Milesen, Principal Scientific Consultant, TSG Consulting – 5/24/18**

*The modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure. Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.*

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF PHILIP A. STANSKY, Ph.D.**

I, Philip A. Stansky, do solemnly swear as follows:

1. I am Professor of Entomology at the University of Florida (UF), Southwest Florida Research and Education Center, 2686 State Road 29 North, Immokalee, FL 34142. I joined UF in 1986, and moved to the Immokalee location in 1989.

2. I hold a Ph.D. in Entomology from Texas A&M (1985), an M.S. in Zoology from the University of Oklahoma (1978), and a B.S. in Zoology from Wayne State University (1967).

3. I am a research and extension entomologist focused on the integrated management of pests affecting major crops grown in southwest Florida, with emphasis on citrus and vegetables. I am the lead author or co-author of more than 538 scientific publications and 158 extension publications in my field, including 172 peer-reviewed articles. I am also the editor of a book and author of 9 book chapters relating to pest management.

4. I develop and test integrated systems of economic and sustainable pest management and their component tactics. I consult with members of the agricultural community, and provide information, training and diagnostic services in collaboration with county and multi-county agents.

5. A key focus of my work for the last 13 years has been and remains the citrus greening disease or huanglongbing (HLB), transmitted by the Asian citrus psyllid (ACP)

*Diaphorina citri*. My work is multifaceted and has included research on the use of aldicarb to control ACP and other citrus pests and to improve citrus yields.

6. Aldicarb (brand name, Temik) was registered for use on citrus in Florida for nearly 30 years until Bayer voluntarily cancelled all of its aldicarb registrations and exited the business at the end of 2010. Subsequently, AgLogic Chemicals, LLC obtained an EPA registration for an aldicarb product similar to Temik, called, AgLogic 15G, labeled for use on several crops not including citrus. AgLogic 15 G was subsequently approved in 2017 for use in Florida on peanuts and cotton by the Florida Department of Agriculture and Consumer Services.

7. I am aware that, at the request of numerous citrus producers, AgLogic Chemicals LLC applied to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG for use on citrus in Florida.

8. In a letter dated October 16, 2017 (attached), I expressed support for this SLN registration in the strongest possible terms. As stated in my letter: “It may not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida’s iconic citrus industry.” Accordingly, I urged that “no effort be spared in registering aldicarb again for citrus in Florida.”

9. I write this Affidavit to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida today.

10. Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”

11. Aldicarb is applied to the soil where it is absorbed by the tree roots and works systemically. As a result, aldicarb provides continuous pest control over an extended period of time, on the order of 90-120 days. At the same time, aldicarb is known to increase root growth, which promotes greater tree health and can lead to larger and more abundant fruit. Our research

cited below from a large scale replicated experiment in a commercial orange grove confirmed increased yield from trees treated with aldicarb. Stansly, P. A., and R. E. Rouse. 1994.

Pest and yield responses of citrus to aldicarb in a flatwoods grove. Proceedings of the Florida State Horticultural Society 107: 69-72.

12. Aldicarb applied through granular applicators below the soil surface has well established integrated pest management and environmental advantages over pesticides that are repeatedly applied through foliar sprays. AgLogic 15 G aldicarb is directly applied into the soil where it is absorbed by the roots, and works systemically against a broad range of pests. As a result, it does not have the same adverse impact as many foliar insecticide sprays on pollinators and other “beneficials” (*e.g.*, wasps, lady beetles, lace wings, and spiders) – which are key to effective integrated pest management programs. The safeguards and stewardship programs that have been adopted over the years for aldicarb provide additional assurance that aldicarb can be used on citrus safely and effectively without harming human health or the environment.

13. The insecticides currently available to citrus growers are, for the most part, applied by ground or aerial spray which may be repeated every 3-4 weeks. Rain events – which are not infrequent during the growing season in Florida – can rapidly wash away these residues, further reducing efficacy. In contrast, once aldicarb is absorbed by the tree roots it will remain active for several months.

14. One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.

15. Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.

16. Another problem faced by citrus growers today is citrus canker. To control canker, growers typically apply a copper-based fungicides at regular intervals. Unfortunately, copper inhibits beneficial mites that control rust mites. As a result, rust mites are a significant problem in many citrus groves where copper has been applied to combat canker. Again, aldicarb is highly effective in providing residual control of rust mites reducing the need for additional sprays.

17. As I noted in my support letter, Florida's iconic citrus industry is in a life or death struggle with HLB for survival. Growers face a host of pest problems, most importantly ACP/HLB, but also rust mites, canker, nematodes, aphids, and others. Hurricane Irma has only exacerbated the difficulties growers now face. In these dire circumstances, growers need more and better management tools, particularly in the face of growing ACP resistance to the neonicotinoids. Aldicarb – a carbamate with a different mode of action– has a proven track record with the Florida citrus industry by providing broad control of psyllids and other important pests while enhancing root growth and fruit production. For all these reasons, I urge the Department to approve an SLN registration for AgLogic 15GG.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on 21 May 2018.

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Philip A. Stansly, Ph.D.

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF WALTER T. JERKINS, JR.**

I, Walter T. Jerkins, Jr., do solemnly swear as follows:

1. I am the President of Premier Citrus and Premier Citrus Management, 635 66<sup>th</sup> Ave. SW, Vero Beach, FL, 32968.

2. Premier is among the largest citrus producers in Florida, managing over 20,000 acres of citrus groves, located in seven (7) counties in Florida. Premier's fresh fruit package house also is one of the largest in Florida.

3. I have more than 40 years of experience in the citrus industry. After graduating from the University of Florida with a major in agriculture in 1975, I worked for about four (4) years at Southern Fruit Distributors, a Florida grower/processor. In 1980, I joined Blue Goose Growers, one of the state's largest grove management company, where I worked for more than 32 years. In 2013, I joined Premier as its President.

4. I am a founding member of Citrus Research and Development Foundation, Inc. (CRDF) and was its first President, a position I held for nine years (2011-Jan. 2018). The CRDF is headed by a 13-member Board of Directors that includes individuals from industry, academia, and government. The CRDF raises money and issues research grants to help companies develop products to combat citrus greening disease (HLB). Through my involvement in CRDF and knowledge of its research, I am well informed about the pest control products currently available



to the citrus industry and products still in the development pipeline. Aldicar is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.

5. I am not aware of any other single product or combination of products that provides the same yield improvement potential to the industry that aldicarb could provide, as discussed below.

6. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.

7. Premier enthusiastically supports AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 11, 2011 (attached), I affirmed Premier's strong support for this SLN registration.

8. The purpose of this Affidavit is to provide further explanation why aldicarb is urgently needed by citrus growers.

9. I have many decades of experience with the use of aldicarb on citrus. During the three decades that I was with Blue Goose Growers, we regularly used aldicarb (Temik) in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently had very positive experiences with aldicarb, which we regarded as a key tool in our arsenal to control insect pests and promote tree growth and fruit production. Year after year we found that when we used aldicarb, trees were healthier and more productive.

10. Premier also used aldicarb very regularly on virtually all of its citrus acres during the many years it was available. Based on my surveying of our grove managers here, Premier's positive experiences with aldicarb were very similar to those of Blue Goose Growers.

11. I have had discussions about aldicarb with many other growers in the industry over the years, including while I was CRDF President. The nearly universal consensus among citrus

producers is that aldicarb is a uniquely valuable product that offers a combination of benefits not provided by any other product or combination of products.

12. Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.

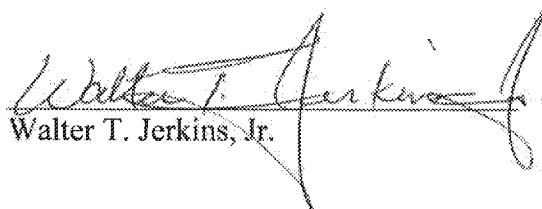
13. The yield response from the use of aldicarb is robust, resulting in a *sustained* yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.

14. The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity – precisely the effects that are so desperately needed now by the citrus industry.

15. For all these reasons, Premier urges the Department in the strongest possible terms to approve AgLogic’s application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.

  
Walter T. Jerkins, Jr.

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF JOHN GOSE**

I, John Gose, do solemnly swear as follows:

1. I am General Manager for Lykes Bros, Inc., 7 Lykes Road, Lake Placid, FL, 33852.
2. Lykes Bros a long-time major player in the Florida citrus industry. We have over 6,000 acres of active citrus groves. Over the last five years we have lost 50% of our citrus acreage due to Citrus Greening.
3. I have more than 40 years of experience in the citrus industry. My family owned citrus groves and I worked in those groves as a teenager. After I graduated from the University of Florida with a degree in agriculture/fruit crops in 1981, I accepted a position at Lykes Bros. I have worked at Lykes Bros in citrus management my entire career.
4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
5. We at Lykes Bros enthusiastically support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 2, 2011 (attached), I affirmed Lykes Bros' strong support for this SLN registration. As stated in my letter: "aldicarb ... is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."

6. The purpose of this Affidavit is to provide further explanation why citrus growers need aldicarb back in their toolbox.

7. Lykes Bros regularly used aldicarb (Temik) in citrus groves we managed for more than two decades, until it was voluntarily withdrawn from the market by Bayer in 2010. We consistently had very positive experiences with aldicarb. Based on our experiences, we consider aldicarb a uniquely valuable product that offers a combination of benefits not provided by any other registered product or combination of products.

8. Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.

9. A serious drawback of foliar insecticides is that they can wipe out pollinators and other “beneficials” (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.

10. In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly *higher pounds of solids per box*, producing a very positive net economic return.

11. The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root

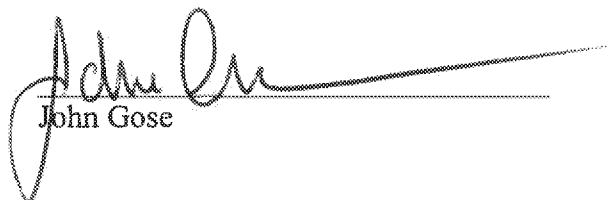
system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.

12. Another serious pest problem associated with citrus production in our groves is root weevils. Citrus greening disease interferes with the transport of sugars and other nutrients from the leaf canopy to the roots through the phloem. To compensate for this, we add nutrients to the soil to help feed the root system. Doing this, however, also supports root weevils (and nematodes). It is not an overstatement to say that root weevils are now a huge problem for Lykes Bros. Aldicarb is needed to combat this problem. When we were able to use aldicarb, we had few problems with root weevils. Root weevil larvae need moisture to come up from the soil and start feeding on the roots. When it was available, we applied aldicarb to soil in November and December. This application timing was perfect for knocking out root weevils before the next fruiting season.

13. For all these reasons, Lykes Bros urges the Department in the strongest possible terms to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 17, 2018.

  
John Gose

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**AFFIDAVIT OF WILLIAM G. ROE II**

I, William (Bill) G. Roe II, do solemnly swear as follows:

1. I am Vice President and Chief Operating Officer for Wm. G. Roe & Sons, Inc. My family has worked in the citrus industry for nearly a century. Wm. G. Roe & Sons, Inc., founded by my grandfather in 1927, is a long-standing player in the Florida citrus industry. We own, manage, or operate approximately 3,000 acres of citrus in various locations across the citrus belt. Our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are perennially one of the top 10 packers in the state. We are also the leading shipper of tangerines in Florida and our brand, Noble, is highly respected in the markets. We have the only private citrus plant breeding program in Florida, which specializes in tangerines.

2. I have more than 40 years of experience in the citrus industry. After graduating from Vanderbilt University in 1975, and taking courses in citriculture at Lake Alfred Citrus Research Station, FL, I began working full-time at Wm G. Roe & Sons in 1976. Prior to that, I worked part-time as a tractor driver and mechanic at the company, starting when I was in high school. I have held several positions at the company, from grove area manager to eventually production manager, a position I held for nearly 20 years. I also worked as our packing house manager for 10 years.

3. I served as President of the Florida Citrus Managers Association from 1986-87, and after appointment to the Florida State PRC, was its Chairman in 1996.

4. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. As stated in my letter dated September 28, 2017 (attached), Wm. G. Roe & Sons strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.

6. Today in Florida we have the benefit of a host of new insecticide chemistries for topical application through spraying. At the same time, Florida has been beset with the citrus greening disease (HLB,) which has manifested itself in a most virulent fashion. Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.

7. This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are

prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both – suppress psyllids and protect beneficials during bloom time – because of its systemic mode of action.

8. While the discussion in the previous paragraph focuses on psyllids, the same point applies to the various members of the scale family, mealybugs, and to some degree leaf miners. Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.

9. A phenomena of the past 12 years since citrus Canker has become endemic in the state has been the necessity of spraying copper every 21 days to control Canker lesions on the peel of many varieties. Canker lesions allow secondary infections to occur in the wounds of the fruit's peel, eventually causing the fruit to drop from the tree, so its control is mandatory for commercial growers. Although we have Streptomycin permitted for topical application and which helps, its application does not allow reduced applications of copper during the growing season. On the down side, application of copper creates a favorable micro-climate for mites to harbor on the peel of the fruit, making them quite difficult to control. When the fruit is quite susceptible during the late spring to Canker, the weather is generally hot and dry, which is perfectly suited for mite build-up even without copper deposits on the surface of the leaves and fruit. Aldicarb provides excellent mite control for an extended period during the spring, is not intrusive to either beneficials or honeybees, and accordingly was one of the reasons why most of the fresh fruit industry used aldicarb when it was available.



10. Another important reason why aldicarb is need by citrus growers today is that it promotes tree health and fruit production – what growers have called a PGR (plant growth regulatory) effect. It is hard to quantitatively assess aldicarb's PGR effect for citrus, but its use causes fruit to have enhanced high peel color and both measurably larger and more uniform size. It could be the combination of aldicarb negating the feeding and sucking of plant bugs and its impact on reducing the nematode population simultaneously, but in any case it is the only chemistry I have used in my 42 years in the industry which enhances the tree's performance and which unquestionably enhances the value of the fruit produced.

11. As growers, we are constantly trying to compensate for the much diminished root system caused by HLB by providing additional fertilizer and nutritional elements. Correspondingly, we are having to apply more foliar copper and leaf nutrients which are exacerbating mite populations. Aldicarb would be a most useful tool for the grower community and the environment by virtue of its providing enhanced control of a broad range of pests while enabling the grower to reduce topical pesticides.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April, 27 2018.

  
William (Bill) G. Roe II

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**AFFIDAVIT OF DAVID OWENS**

I, David Owens, do solemnly swear as follows:

1. I am the Director of Chemical Sales for Alico Citrus, 12010 Hwy 70, Arcadia, FL, 34266. I have held this position since the end of 2015. My responsibilities at Alico include purchasing from, and liaising with, suppliers of pesticides, fertilizers, and other chemical products for use in citrus.

2. Alico, based in Fort Myers, FL, is among the largest citrus growers in the United States, with some 32,000 acres of citrus groves. In 2017, Alico was the country's largest citrus producer, producing 7.6 million boxes of fruit.

3. Prior to joining Alico, I worked in sales for Rhone Poulenc, and its corporate successors, Aventis and Bayer, for more than 20 years. During this time, I was responsible for the largest sales territory in Florida for the product, Temik, containing aldicarb. My work included talking with growers, interfacing with extension service scientists, and dealing with issues relating to registration, product application, stewardship and other matters. Overall, I have more than 35 years of experience with the citrus industry.

4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. We at Alico strongly support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 10, 2017 from Steve Ryan, President of Citrus Operations (attached), Alico affirmed its support for an SLN registration for aldicarb for citrus. As stated in that letter: "It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications. .... It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated."

6. I and Alico stand by these statements in the October 10, 2017 letter. The purpose of this Affidavit is to explain further why aldicarb is urgently needed by citrus growers, as it fills a need not met by any other product, or combination of products, currently available.

7. Alico has a long, positive history with aldicarb. Alico regularly used aldicarb (Temik) in its citrus groves for at least 20 years, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. Alico's very favorable experiences with aldicarb that spanned decades are the foundation for its strong support for an SLN registration for aldicarb.

8. Aldicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree

growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides.

9. No other product on the market has the same positive effects on tree health and fruit production that Alico – and many other citrus growers – have obtained with the use of aldicarb. During the years Alico used Temik/aldicarb, it realized a very favorable return on its investment in the use of the product year after year.

10. The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.

11. Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.

12. Although there are other products that are labeled for psyllid control, Alico has found that the efficacy of these products for psyllid control has plateaued in recent years. There is great concern at Alico and in the industry that resistance to these chemistries, particularly “neonics” such as imidacloprid, is growing. This is another reason why aldicarb is urgently needed at this time. Aldicarb, a carbamate class pesticide, provides a different mode of action and its use would greatly assist in managing psyllid resistance.

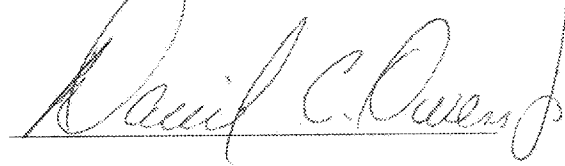
13. Aldicarb also provides well established environmental benefits. Because it is injected into the soil, it poses far less risk of harm to pollinators and other non-target beneficial insects than alternatives that are applied by foliar spray. The ability to use aldicarb would materially reduce the number of foliar applications of pesticides needed to control early season psyllids, and rust mites, greatly reducing the potential adverse impacts of harsher sprays on

beneficials and the environment. Aldicarb also has a much longer residual effect because it is distributed under the soil, and works best in wet soil. In contrast, foliar applications wash out in Florida's frequent rains and have to be repeated more often. It is fair to say that aldicarb is unique when it comes to controlling pests, while also increasing tree vigor and yields. There are also well established benefits of aldicarb on young trees. Aldicarb gives increased root flushes, and promotes the growth of young non-bearing and bearing trees.

14. For all these reasons, I urge the Department to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 29, 2018.

A handwritten signature in cursive script, appearing to read "David C. Owens", written over a horizontal line.

David Owens

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF TIMOTHY J. DOOLEY**

I, Timothy J. Dooley, do solemnly swear as follows:

1. I am the Vice President and General Manager of Blue Goose Growers, a citrus grove and crop management company based in Ft. Pierce, Florida. I have worked for Blue Goose Growers for approximately 27 years.
2. Blue Goose Growers manages approximately 10,000 acres of citrus trees.
3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
4. As stated in my letter dated October 11, 2017 (attached), Blue Goose Growers strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.
5. Citrus growers in Florida, including groves under Blue Goose Growers' management, have a long history of using aldicarb (Temik) successfully to control pests and threaten Florida's citrus crops.

6. Since aldicarb was removed from the market, the health of the Florida citrus industry has declined immensely. HLB is ravaging the industry, and growers are suffering from declining tree health and decreased fruit size and yield.

7. Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.

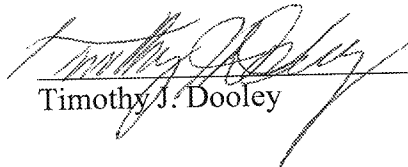
8. In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.

9. In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often.

10. There is no product or combination of products available to citrus growers today that offers the benefits of aldicarb. In addition to the longer residual control it provides, it is critically needed because it controls a wide range of pests, enhances tree health, and increases fruit production.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May, 17, 2018.

  
Timothy J. Dooley

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF \_\_\_\_\_) )  
Application of AgLogic Chemicals, LLC \_\_\_\_\_) )  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_) )  
Registration for \_\_\_\_\_) )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_) )  
\_\_\_\_\_)

**AFFIDAVIT OF MARVIN KAHN**

I, Marvin Kahn, do solemnly swear as follows:

1. I am the primary owner of Kahn Citrus Management (KCM), based in Sebring, FL. KCM manages thousands of acres of citrus in Polk, Highlands, Hardee and DeSoto counties, FL.
2. My father entered the citrus industry when he purchased his first orange grove in the 1930s. I have been a part of the citrus industry my entire working life, and have more than 60 years of experience in citrus management. (I just celebrated my 85<sup>th</sup> birthday.)
3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
4. As stated in my letter dated November 3, 2017 (attached), we at KCM fully support AgLogic's SLN application. Our support for this SLN registration is based on decades of favorable experiences that we have had with aldicarb (Temik), up until the end of 2010, when it was voluntarily withdrawn from the market by Bayer.
5. The purpose of this Affidavit is to explain further why aldicarb is so urgently needed by KCM and other citrus growers in Florida.
6. Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including



nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better – and are healthier – than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.


7. Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.

8. Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.

9. In summary, if aldicarb were available, growers would be able to control psyllids, rust mites, and other pests with fewer foliar sprays involving harsher chemistries. Overall, trees would be healthier and more productive, and there would be less damage to honeybees and other beneficials.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April \_\_, 2018.

  
\_\_\_\_\_  
Marvin Kahn

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF \_\_\_\_\_) )  
Application of AgLogic Chemicals, LLC \_\_\_\_\_) )  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_) )  
Registration for \_\_\_\_\_) )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_) )  
\_\_\_\_\_)

**AFFIDAVIT OF CODY LASTINGER**

I, Cody Lastinger, do solemnly swear as follows:

1. I hold the position of Manager – Horticultural Services for Consolidated Citrus, LP (“Consolidated”), 63 Barn Road, Venus, FL 33960. Consolidated is among the largest citrus producers in the United States, with some 30,000 acres of citrus groves.

2. I graduated from the University of Florida in 2013 with a Master’s in Agronomy and Weed Science. I received a second Master’s in Aquatic Plant Management from the University of Florida Gainesville in 2017. I became Manager – Horticultural Services at Consolidated very recently, after the former long-time Manager, Michael J. Stewart, recently retired.

3. I am aware that AgLogic is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG aldicarb pesticide for use on citrus in Florida.

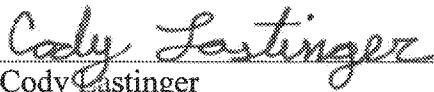
4. In a letter dated October 20, 2017 (attached), former manager Michael Stewart expressed Consolidated’s strong support for this SLN registration. This support is based on Consolidated’s many decades of favorable experiences with aldicarb (brand name, Temik), up through 2010, when it was voluntarily cancelled by Bayer. As stated in our October 20, 2017 letter: “When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective

pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.”

5. The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 23, 2018.

  
Cody Lastinger

BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES

)  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FLRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
)

**AFFIDAVIT OF ROBERT H. BARBEN AND JOHN P. BARBEN**

We, Robert H. Barben and John P. Barben, do solemnly swear as follows:

1. I, Robert H. Barben, am President and I, John P. Barben, am Vice President, of Robert J. Barben, Inc., 21 East Pine Street, Avon Park, FL 33825. Robert J. Barben, Inc. is a family business that traces its origins back to the 1920s. We have been in the business of growing and managing citrus for many decades. We currently manage about 1800 acres of citrus located in four counties in Florida.

2. We are aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

3. We at Robert J. Barben, Inc. strongly support AgLogic's SLN application for the use of aldicarb on citrus. In a letter dated October 13, 2017 (attached), we affirmed our unqualified support for this SLN registration.

4. The purpose of this Affidavit is to provide further explanation as to why aldicarb is urgently needed by Florida citrus growers today.

5. Our company has extensive experience with the use of aldicarb on citrus. During the 2-3 decades that aldicarb (brand name, Temik) was available to us, we used it regularly in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently saw very positive results with aldicarb. We found that when we used aldicarb, trees were healthier and more productive.

6. The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them.

7. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ASP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.

8. A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.

9. We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficials when we used aldicarb. Aldicarb is applied to the soil, not topically, and works systemically, so there is far less direct

exposure to beneficials with aldicarb.

10. The addition of aldicarb, which is a carbamate with a different mode of action, would be very helpful to citrus growers in managing pesticide resistance.

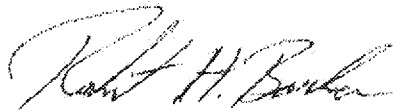
11. If aldicarb were available, we would apply it to the soil in winter months. This would enable us to reduce the number of foliar sprays by at least 2-3 during the spring months, which would reduce adverse impacts on beneficials.

12. Another reason why we urgently need aldicarb back is that it aldicarb increases root growth and fruit production. In our experience, using aldicarb is like giving the tree a steroid; the trees are healthier and there is a very definite growth response. Even more important economically, aldicarb increases the *pounds solids* produced by the tree. No other product compares to aldicarb in stimulating tree growth and fruit production.

13. In summary, aldicarb offers a unique combination of benefits not offered by any other single registered product or combination of registered products. These benefits include broad, long-lasting control of rust mites, minimal impacts on beneficials, and increased tree health and fruit production. These benefits are urgently needed by citrus growers now, more than ever. For these reasons, Robert J. Barben, Inc. urges the Department to approve an SLN registration for AgLogic 15 GG.

We declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.



Robert H. Barben



John P. Barben

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF BETH E. MILESON, PH.D.**

I, Beth E. Milesen, do solemnly swear as follows:

1. I hold the position of Principal Scientific Consultant, Team Leader, Toxicology at Technology Sciences Group, Inc. (TSG), based in TSG's office at 1101 17<sup>th</sup> Street, N.W., Suite 500, Washington, D.C., 20036. I have worked at TSG since 2001,
2. TSG is a part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG).
3. A copy of my Curriculum Vitae is attached. As reflected therein, I received a Ph.D. in Toxicology from the University of North Carolina in Chapel Hill in 1989. I also hold a Bachelor of Science in Biology/Zoology and Master of Science in Biology from George Washington University, as well as a Masters in Business Administration from George Mason University.
4. I am and have been a board-certified toxicologist, otherwise known as a Diplomate of the American Board of Toxicology, continuously since 1996.
5. I have more than 20 years of experience designing, conducting and reviewing toxicological risk assessments.
6. AgLogic asked me to conduct an acute aggregate dietary exposure and risk assessment for aldicarb using the Dietary Exposure Evaluation Model software with the Food

Commodity Intake Database (DEEM-FCID) using methods identical to those used by the U.S. Environmental Protection Agency (US EPA) in its assessment in 2016.<sup>1</sup>

7. The exposure assessment I conducted for AgLogic was intended to estimate potential exposure of the general US population and all sub-populations to aldicarb assuming that 20% of the US citrus crop is treated with aldicarb. For this assessment I used as a starting point the basic data files and assumptions provided by the US EPA in 2016. In addition to the assumed use of aldicarb on 20% of the citrus crop, two assumptions in my aggregate exposure assessment differed from the US EPA: (1) The US EPA assumed that 100% of the imported crops supported by tolerances are treated with aldicarb, while I assumed that no aldicarb residues were in/on imported crops because aldicarb is not registered anywhere outside the US. (2) The aldicarb residue levels in water that I used in the exposure assessment were provided in a report prepared by Waterborne Environmental for AgLogic.<sup>2</sup> The DEEM modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions as described above.

8. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure.<sup>3</sup> Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results

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<sup>1</sup> US EPA, 2016. Memorandum: Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessments for Registration Review Risk Assessment. From: Ideliz Negrón-Encarnación, to: Susan Bartow. PC Code: 098301, DP Barcode: D430197, Office of Pesticide Programs, Office of Chemical Safety and Pollution Prevention, US Environmental Protection Agency, 3/28/2016. 34 pages.

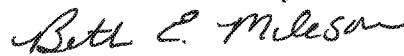
<sup>2</sup> Ritter, A.M. 2017. Aldicarb: Drinking Water Exposure Assessment. Unpublished report by Waterborne Environmental Inc. Study No.: 245.01. November 14, 2017. 22 pages. MRID 50549101.

<sup>3</sup> Milesen, B.E. 2017. Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessment for Proposed Uses. Unpublished report by Technology Sciences Group, Inc. Document No.: 20170230. December 28, 2017. 27 pages. MRID 50549102.

in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 24, 2018.

A handwritten signature in cursive script, appearing to read "Beth E. Miles".

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Beth E. Miles



# Curriculum Vitae Beth E Milesen

## **Beth E. Milesen, Ph.D., DABT**

Technology Sciences Group Inc.

Washington, DC 20036

Phone: (202) 828-8956

email: bmilesen@tsgusa.com

## **EDUCATION**

MBA, George Mason University, Fairfax, VA, (2013)

PhD, Toxicology, University of North Carolina, Chapel Hill, NC (1989)

MS, Biology/Zoology, George Washington University, Washington, DC (1984)

BA, Biology, George Washington University, Washington, DC (1981)

## **PROFESSIONAL EXPERIENCE**

### **Technology Sciences Group Inc. (TSG)**

**2001 to Present**

*Technology Sciences Group Inc. is part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG), and provides state, federal and international expertise on a wide range of scientific and regulatory issues. With experts in regulatory affairs, chemistry, toxicology, environmental fate and risk assessment, TSG provides services in support of the development, registration, compliance and defense of chemically related products. Clients include chemical, pesticide, consumer product, food, personal care and animal health companies, as well as industry groups, trade associations, and law firms.*

### **Principal Scientific Consultant, Team Leader**

#### **Responsibilities include:**

- Create comprehensive toxicology and risk assessment strategies to inform clients' business decisions and achieve their regulatory goals;
- Design and conduct human health and ecological risk assessments to support product stewardship, registrations and certifications;
- Meet with federal and state officials and stakeholder groups to discuss and resolve scientific issues;
- Design toxicology testing programs and testing strategies to support new and existing products;
- Support TSG management and staff in scientific and administrative matters.
- Clients include large producers and marketers of consumer products, chemicals and pesticides, as well as a number of small businesses, biotech firms, and trade associations.

### **ARCADIS**

**2000 to 2001**

*ARCADIS is an international company that provides consultancy, design, engineering and management services in the fields of Infrastructure, Water, Environment and Buildings. With more than 22,000 employees and more than \$3.3B in revenues the company has an extensive international network that is supported by strong local market positions.*

## Curriculum Vitae Beth E Milesen

### Principal Scientist

#### Responsibilities included:

- Develop toxicological and human health risk assessments for site-specific and chemical-specific scenarios,
- Develop and maintain client relationships,
- Mentor junior staff.

### **ILSI Risk Science Institute**

**1996 to 2000**

*The International Life Sciences Institute (ILSI) is a nonprofit, worldwide organization whose mission is to provide science that improves public health and well-being. It achieves this mission by fostering collaboration among experts from academia, government, and industry on conducting, gathering, summarizing, and disseminating science. Its activities focus primarily on nutrition and health promotion; food safety; risk assessment; and the environment.*

### Senior Scientist

#### Responsibilities included:

- Design and implement programs to advance the scientific basis of risk assessment;
- Create proposals outlining goals and objectives, strategic plans and budgets necessary to complete projects;
- Collaborate with scientists from U.S. and international agencies and organizations including the U.S. Environmental Protection Agency, Food and Drug Administration and Organization for Economic Cooperation and Development;
- Direct and chair working groups composed of scientists from academia, industry, government and public interest groups and stimulate them to reach consensus on difficult scientific issues.

#### Projects included:

1. Develop principles to determine what constitutes a common mechanism of toxicity;
2. Develop guidance for the design and interpretation of studies to characterize acetylcholinesterase activity in the peripheral nervous system;
3. Develop a framework for cumulative risk assessment; and
4. Evaluate experimental methods to identify and characterize developmental neurotoxicity.

### **NC Department of Environment & Natural Resources**

**1992 to 1996**

*The North Carolina Department of Environment and Natural Resources (DENR) Division of Air Quality (DAQ) works to protect and improve outdoor, or ambient, air quality in North Carolina for the health, benefit and economic well-being of all. To carry out this mission, the DAQ operates a statewide air quality monitoring network to measure the level of pollutants in the outdoor air, develops and implements plans to meet future air quality initiatives, assures compliance with air quality rules, and educates, informs and assists the public with regard to air quality issues.*

### Toxicologist

#### Responsibilities included:

- Design, conduct, and interpret large-scale ambient sampling studies used to characterize concentrations of toxic air pollutants and assess citizen exposure and risk,
- Direct the DENR Secretary's Scientific Advisory Board on Toxic Air Pollutants (SAB),
  - Work with scientists from research institutions, universities, government and industry;
  - Identify toxic air pollutants (TAPs) of concern to North Carolina;

## Curriculum Vitae Beth E Milesen

- Conduct risk assessments for TAPs based on primary literature.

### **Projects included:**

1. Design and direct large-scale ambient monitoring studies to measure TAPs emitted by petroleum terminals, wood furniture manufacturing facilities and polyurethane foam producing facilities;
2. Assess potential human exposure to emissions from hazardous waste-burning incinerators, phosphate mining operations, petroleum terminals and furniture manufacturing facilities based on measured ambient levels and modeled concentrations of TAPs;
3. Prepare risk assessments and derive acceptable ambient levels (AALs) for many toxicants, including, allyl chloride, toluene diisocyanate, methylene chloride and formaldehyde.

### **Duke University Medical Center**

**1989 to 1991**

*Duke University has about 13,000 undergraduate and graduate students and a world-class faculty helping to expand the frontiers of knowledge.*

### **Research Associate, Department of Pharmacology and the Center for the Study of Aging**

#### **Responsibilities included:**

- Design and conduct behavioral, neurochemical and neuropharmacologic studies to determine toxicologic mechanisms involved in selective neuronal degeneration that occurs following transient forebrain ischemia, an animal model of stroke;
- Supervise undergraduate and graduate students and technical staff.

#### **Projects included:**

1. Complete three comprehensive studies on neuronal degeneration,
2. Publish the results in the peer-reviewed literature;
3. Fulfill postdoctoral training in sociology, physiology, cardiology, and disease in aging populations.

### **University of North Carolina- Chapel Hill**

**1985 to 1989**

*The University of North Carolina at Chapel Hill prides itself as the nation's first public university, serving North Carolina, the United States and the world through teaching, research and public service.*

### **Doctoral candidate, Curriculum in Toxicology in the Medical School of UNC – Chapel Hill**

#### **Responsibilities included:**

- Conduct research in Dr. Richard Mailman's Neurotoxicology Laboratory on the effects of toxicants on brain dopamine neurotransmission in rats;
- Train and supervise laboratory technicians.

# Curriculum Vitae Beth E Mileson

## **George Washington University**

**1980 to 1984**

*The George Washington University is located in the nation's capital and is an institution with a history of dedication to educating and preparing future leaders.*

### **Master's degree candidate, Department of Biological Sciences**

- Conduct research in Dr. Randall Packer's laboratory to determine how acid-base balance in tropical land crabs is affected by changing environmental temperature;
- Teach human and advanced human physiology to undergraduate students.

### **Undergraduate Student Researcher, Department of Biological Sciences**

- Conduct undergraduate research in the laboratory of Dr. John Burns, to determine the seasonal variation in the reproductive biology of tropical poeciliid fish in the absence of significant seasonal changes in day-length.

## **CERTIFICATIONS**

Diplomate of the American Board of Toxicology, 1996; recertified: 2001, 2006, 2011, 2016

## **PROFESSIONAL MEMBERSHIPS**

Society for Risk Analysis  
Society for Neuroscience  
Society of Toxicology  
American Association for the Advancement of Science

## **INVITED PARTICIPANT IN WORKING GROUPS/TASK FORCES**

- **Workshop:** Risk Assessment Methodologies Workshop on Approaches to Weight of the Evidence Evaluation in Risk Assessment, ILSI Health and Environmental Sciences Institute, December 2006.
- **Working Group:** Food Safety in Europe: Risk Assessment of Contaminants in Food, **European Union Concerted Action and ILSI Europe**, January-October 2000
- **Workshop:** Threshold of Toxicological Concern, **ILSI Europe**, October 1999
- **Workshop:** The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- **Working meeting** for development of Total Risk Integrated Model, **U.S. EPA**, June 1996
- **Workshop:** Mechanism-based Toxicology in Cancer Risk Assessment: Implications for Research, Regulation and Legislation, **National Toxicology Program**, January 1995
- **Working Group:** Board of Scientific Counselors Ad Hoc Working Group to review the Criteria for Listing Carcinogens, **National Toxicology Program**, April 1995
- Task Force on Risk-Based Protocol for Determination of Soil and Water Clean-up Levels, **NC Department of Environment and Natural Resources**, 1995-1996

## Curriculum Vitae Beth E Mileson

- Ad Hoc Committee for Air Quality Standards **ACGIH**, 1995
- Air Toxics Committee member, **State and Territorial Air Pollution Program Administrators (STAPPA) and Association of Local Air Pollution Control Officials (ALAPCO)**, 1994-1996

### INVITED PRESENTATIONS

- *Cumulative Risk Assessment of OP Pesticides in the Diet based on a Probabilistic Method for Exposure Assessment.* at the Asia-Wide Symposium on Risk Assessment of Contaminants in Food, Seoul, South Korea, **Korea Food and Drug Administration**, November 1999
- *A Framework for Cumulative Risk Assessment* at the workshop: The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- *A Comparison of Three Methods to Cumulate Risk Due to Exposure to Multiple Chemicals that Act by a Common Mechanism of Toxicity.* **American Crop Protection Association**, December 1998
- *Common Mechanism of Toxicity, Report of the ILSI RSI Working Group.* **EPA FIFRA Scientific Advisory Panel**, 1998
- *Common Mechanism of Toxicity: A Case Study of OP Pesticides* **EPA OPP Pesticide Program Dialogue Committee**, 1998
- *Procedures and Functions of the Secretary's Scientific Advisory Board on Toxic Air Pollutants.* **NC Legislative Committee on Air Quality** 1996
- *Monthly Briefing* Air Quality Committee of the **North Carolina Environmental Management Commission**, 1995-1996
- *Investigation of Bulk Gasoline Terminals at Paw Creek, Mecklenberg County, NC.* **NC Legislative Environmental Review Committee**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation*, **Press Conference**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation*, **Public Meeting**, February 1994
- *Reconciliation of the NC Regulations for Control of Toxic Air Pollutants with the Federal Clean Air Act of 1990.* **NC Aggregates Association**, May 1993 and **Guilford County LEPC Industry Forum Meeting**, May 1993

### ADDITIONAL PROFESSIONAL ACTIVITIES

- Partner with ILSI Europe on **A European Commission Concerted Action** on Risk Assessment of Chemicals in Food and Diet, April, 2000-February 2001
- Organized and chaired a symposium on Cumulative Risk Assessment at the **Society for Risk Analysis Annual Meeting**, December 1999
- Nominated as a potential member of the **EPA FIFRA Scientific Advisory Panel** (declined due to participation in ILSI activities germane to issues considered by the SAP) October, 1997
- Member of the Editorial Advisory Board, **Reviews in Toxicology**, **IOS Press** (2001).

**FULL LENGTH REFEREED PUBLICATIONS**

1. Milesen, B.E., Packer, R.K., 1986. Hemolymph acid base balance in the terrestrial crab, *Gecarcinus ruricola*, with changing environmental temperature. **Comp. Biochem. Physiol.** 85A:4;715719.
2. Milesen, B.E., Schwartz, R.D., 1991. The use of locomotor activity as a behavioral screen for neuronal damage following transient forebrain ischemia in gerbils. **Neuroscience Letters** 128; 71-76.
3. Milesen, B.E., Lewis, M.H., Mailman, R.B., 1991. Dopamine receptor "supersensitivity" occurring without receptor up-regulation. **Brain Research**, 561; 1-10.
4. Schwartz, R.D., Yu, X., Wagner, J., Ehrmann, M., Milesen, B.E., 1992. Cellular regulation of the benzodiazepine/GABA receptor: arachidonic acid, calcium, and cerebral ischemia. **Neuropsychopharmacology**, 6; 119-125.
5. Milesen, B.E., Ehrmann, M.L., Schwartz, R.D., 1992. Alterations in the GABA-gated chloride channel following transient forebrain ischemia in the gerbil. **Journal of Neurochemistry**, 58; 600-607.
6. Lawler, C.P., Gilmore, J.H., Mooney, D.H., Mayleben, M.A., Atashi, J.R., Milesen, B.E., Wyrick, S.D., Mailman, R.B., 1993. A rapid and efficient method for the radiosynthesis and purification of [125I]SCH23982. **Journal of Neuroscience Methods**, 49; 141-153.
7. Milesen, B.E., Chambers, J.E., Chen, W.L., Dettbarn, W., Ehrich, M., Eldefrawi, A.T., Gaylor, D.W., Hamernik, K., Hodgson, E., Karczmar, A.G., Padilla, S., Pope, C.N., Richardson, R.J., Saunders, D.R., Sheets, L.P., Sultatos, L.G., Wallace, K.B., 1998. Common mechanism of toxicity: A case study of organophosphorus pesticides. **Toxicological Sciences**, 41; 8-20.
8. Milesen, B.E., Chambers, J.E., Ehrich, M., Hamernik, K., Hodgson, E., Reith, J.P., Saunders, D.R., Sheets, L.P., Sultatos, L.G., Van pelt, C., Wallace, K.B., 1999/2000 Common mechanism of toxicity: evaluation of carbamate pesticides. **Reviews in Toxicology**, 3; 127-138.
9. Milesen, B.E., Ferenc, S.A., 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment: overview. **Environmental Health Perspectives**, 109 (suppl 1); 77-78.
10. Cory-Slechta, D.A., Crofton, K.M., Foran, J.A., Sheets, L.P., Ross, J.F., Weiss, B., **Milesen, B.E.** 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment. II: behavioral considerations. **Environmental Health Perspectives**, 109 (suppl 1); 79-91
11. Dorman, D.C., Allen, S.L., Byczkowski, J.Z., Claudio, L., Fisher, J.E., Fisher, J.W., Harry, G.J., Li, A.A., Makris, S.L., Padilla, S., Sultatos, L.G., **Milesen, B.E.** 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment. III: Pharmacokinetic and pharmacodynamic considerations. **Environmental Health Perspectives**, 109 (suppl 1);101-111.
12. Edler L, Poirier K, Dourson M, Kleiner J, **Milesen B**, Nordmann H, Renwick A, Slob W, Walton K, Wurtzen G. 2002. Mathematical modeling and quantitative methods. **Food Chem Toxicol.** 40(2-3):283-326.

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13. Gargas M.L., Kinzell J.H., Milesen B.E. 2009. Foreword to a special issue of Inhalation Toxicology on a risk assessment for iodomethane. **Inhal Toxicol.** 21(05-07); 447.
14. Milesen B.E., Sweeney L.M., Gargas M.L., Kinzell J.H. 2009. Iodomethane Human Health Risk Characterization. **Inhal Toxicol.** 21(05-07); 583-605.

### BOOK CHAPTERS AND NONREFEREED PUBLICATIONS

1. Mailman, R.B., Milesen, B.E., Lewis, M.H., 1987. Neurotoxicity expressed through alterations of cell cell interaction. in: **Biochemical mechanisms and regulation of intracellular communication.** Princeton Scientific Publishing, Princeton, N.J. pp 97112.
2. Milesen, B.E., Hedrick, M., 1996. Evaluation of emissions from a bulk petroleum terminal cluster in Mecklenberg County, NC. **Air & Waste Management Meeting Proceedings, 1995 meeting.**
3. Milesen, B.E., 1996. Investigation of toxic air pollutants emitted by wood furniture manufacturing facilities in Caldwell County, North Carolina. **NC DEHNR Air Quality Investigation Report**
4. Milesen, B.E., 2001. Guest Perspective: EPA Pesticide Cumulative Risk Model Evolution Continues. **Risk Policy Report.** Volume 8 (10) 30-32.

### ABSTRACTS

1. Gatzky, J.T., Milesen, B.E., 1986. Permeability of excised rat urinary bladder and separation of the urothelium. **ASPET-SOT Abstract.**
2. Milesen, B.E., Lewis, M.H., Mailman, R.B., 1987. Regulation of dopamine receptor sensitivity: effects of 1-methyl-4-phenylpyridinium on priming. **Soc. Neuroscience Abstracts** 13; 27.20.
3. Lewis, M.H., Keresztury, M.F., Walker, Q.D., Cook, L.S., Milesen, B.E. Mailman, R.B., 1987. Diabetes-induced polydipsia in rats: dependence on intact dopamine function and mediation by central insulin. **Soc. Neuroscience Abstracts** 13; 67.13.
4. Milesen, B.E., Mailman, R.B., 1988. Disparate consequences of two distinct 6-hydroxydopamine (6-OHDA) brain lesions in rats. **The Toxicologist** Feb. 1988. Abstract
5. Milesen, B.E., Mailman, R.B., 1988. Comparison of behavioral and biochemical consequences of two distinct models of central dopaminergic denervation supersensitivity. **Soc. Neuroscience Abstracts** 14; 375.2.
6. Milesen, B.E., Mailman, R.B., 1989. Autoradiographic evaluation of D1 and D2 dopamine receptors following central dopaminergic denervation. **Soc. Neuroscience Abstracts** 15; 236.7.

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7. Milesen, B.E. and Schwartz, R.D., 1990. Effects of bilateral carotid occlusion (BCO) on GABA<sub>A</sub> receptor function in Mongolian gerbil brain. **Soc. Neuroscience Abstracts** 16; 385.14.
8. Ehrmann, M.L., Milesen, B.E., Edgar, P.P., Schwartz, R.D., 1990. Effects of bilateral carotid occlusion (BCO) on the GABA<sub>A</sub> receptor/chloride channel in Mongolian gerbil brain: autoradiography using <sup>35</sup>S-TBPS. **Soc. Neuroscience Abstracts** 16; 385.15.
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# **ATTACHMENT 2**

## Letters from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida

The attached 11 letters were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the sworn affidavits that were submitted by these researchers and citrus growers.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC -- 10/16/17**

(Also see the sworn affidavit from Dr. Philip Stansly, dated 5/21/18)

*"There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane."*

**2. Walter T. Jerkins, President, Premier Citrus LLC -- 10/11/17**

(Also see the sworn affidavit from Walter T. Jerkins, dated 5/23/18)

*"Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus."*

**3. John Gose, General Manager, Lykes Bros. Inc -- 10/2/17**

(Also see the sworn affidavit from John Gose, dated 5/17/18)

*"We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc -- 9/28/17**

(Also see the sworn affidavit from William Roe, dated 4/27/18)

*"As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant*

*and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product."*

**5. Steve Ryan, President, Alico Citrus -- 10/10/17**

(Also see the sworn affidavit from Dave Owens, Director of Chemical Sales, Alico Citrus, dated 5/29/18)

*"As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product."*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 10/11/17**

(Also see the sworn affidavit from Tim Dooley, dated 5/17/18)

*"Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!"*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC – 11/3/17**

(Also see the sworn affidavit from Marvin Kahn, dated 5/xx/18)

*"We have had experience using Aldicarb in the past and have witnessed firsthand its positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods."*

**8. Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP – 10/20/17**

(Also see the sworn affidavit from Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP, dated 5/23/18)

*"I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers*

*who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials."*

**9. John Barden, Vice President, Barben Fruit Company Inc – 10/13/17**

(Also see the sworn affidavit from John Barden, dated 5/30/18)

*"Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid."*

**10. David Howard, Vice President Operations, Graves Brothers Company – 11/3/17**

*"Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control."*

**11. Keith Davis, Owner, Florida Fertilizer Company Inc -- 10/10/17**

*"Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements."*

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To: Antoine A. Puech, Managing Member, AgLogic Chemical LLC  
From: Dr. Philip A. Stansly, [pstansly@ufl.edu](mailto:pstansly@ufl.edu)  
Cc: Ron Hamel, Gulf Citrus Growers Association  
Date: 16 October 2017  
Subject: Re-registration of aldicarb

Dear Sir,

By means of this memo I would like to express my full support for the re-registration of Aldicarb in citrus. I am a research and extension entomologist working on citrus at this Center since 1989. My appointment is state wide with emphasis of the southwest growing regions which comprises about 25% of total citrus production in the state. During this time I have had considerable experience working with aldicarb, both pre and post greening (HLB) as you can see from the citations below. In my estimation aldicarb is an excellent product both in terms of efficacy as well as environmental and personal safety, thanks to the safeguards and stewardship actually in place.

There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane. Therefore, I urge that no effort be spared in registering aldicarb again for citrus in Florida and elsewhere in the US wherever citrus is grown. Please feel free to contact me for any additional information with respect to this issue.

Best Regards,

Digitally signed by Phil Stansly  
DN: cn=Phil Stansly, o=UF-IFAS, ou=SWFREC,  
email=pstansly@ufl.edu, c=US  
Date: 2017.10.16 11:58:17 -04'00'

Philip A. Stansly  
Professor of Entomology

**References cited:**

Stansly, P. A., and R. E. Rouse. 1994. Pest and yield responses of citrus to Aldicarb in a flatwoods grove. *Proceedings of the Florida State Horticultural Society* 107: 69-72.

Stansly, P. A., and R. E. Rouse. 1994. Pest and yield responses to Temik in southwest Florida's flatwoods - Year 2. *Citrus and Vegetable Magazine* 57: 6-7.

Croxtan, S. D., T. L. Stansly and P. A. Stansly. 2012. Timing of temik and movento applications for control of Asian citrus psyllid (ACP) *Diaphorina citri*, 2010. *Arthropod Management Tests*, 37: D1

Qureshi, J. A., and P. A. Stansly. 2008. Rate, placement and timing of aldicarb applications to control Asian citrus psyllid, *Diaphorina citri* Kuwayama (Hemiptera: Psyllidae), in oranges. *Pest Management Science* 64: 1159-1169.



P.O. BOX 690759  
Vero Beach, FL 32969

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 So Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech;

I am writing this letter with the intent to offer my full support as well as the full support of all of Premier's citrus related companies and clients in Florida for the re-registration of Aldicarb as a restricted use pesticide in Florida.

I currently serve as President of Premier Citrus and Premier Citrus Management, and together these companies have directly managed over 20,000 acres of citrus annually, in seven different Florida counties since 2005. Premier also operates one of the industry's largest fresh fruit packing houses, as well as one of the largest fresh citrus marketing companies. Prior to working with Premier, I managed the state's largest grove management company, Blue Goose Growers all the way back to 1980, including the Dole Citrus activities between 1983 and 2000.

My experience in crop management goes all the way back to 1975, but closer to 1980 when I first became actively involved and responsible for the selection and use of citrus pesticides. Since Aldicarb first became available in Florida, we used the product on practically all of our managed acres at the labeled rate due to the easiest of all metrics to track: higher earnings.

Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus.

Improved yields were most often a result of improved size, which always carries a premium in the fresh fruit business. That size improvement as well as overall blemish control was easily noticed in the packinghouse and drove more favorable size and quality packages, again driving up revenues for fresh fruit as well as juice fruit.

In fact, the product was so important to our annual production plan that actively participating in complying with the Stewardship program was a high company priority to insure

that by our safe use we could help the registrant keep the product available out into the future. It was a major disappointment when Bayer voluntarily pulled the label in 2010, and we believe strongly that its discontinued use and loss of the PGR and other effects coincided and contributed to both our company and the Florida industry yield decline as the additional pressure of ACP and HLB expanded and has contributed to this day.

Premier's current nucleus of excellent grove managers happen to be the remnants of one of the industry's largest Aldicarb applicators prior to 2010, and we have access to those same machines now. Together with those machines and experienced managers and applicators, Premier could be in the application business as quickly as anyone, as we have the weight of the grove financial base also pushing for this application capability.

The availability of Aldicarb will be a valuable offset to the nagging weak tree health that continues to suffocate our yields. HLB has the Florida industry on its heels, and with the last hurricane, it's fair to say we're desperate to obtain any tools that can even incrementally get us back to improved productivity and revenues to keep us in business.

Please keep up your best effort to obtain a registration by whatever means necessary, and consider Premier a strong supporter willing to help you at every turn.

Thank you for considering our need and our support of your pursuit of the use of Aldicarb for Florida citrus growers.

A handwritten signature in black ink, appearing to read "Walter T. Jerkins, Jr.", with a stylized flourish at the end.

Walter T. Jerkins, Jr.  
President, Premier Citrus, LLC  
625 66th Ave SW, 32968  
Vero Beach, Florida  
Ph: 772-469-1549, Mobile: 772-473-9754



# LYKES BROS. INC.

7 Lykes Road  
Lake Placid, FL 33852-9582



Telephone: (863) 465-4127  
FAX: (863) 465-2289

To: Antoine Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

October 2, 2017

Dear Mr. Puech,

My name is John Gose and I am the General Manager for Lykes Bros. Inc. Our company has been a major player in the citrus industry for many decades now. We have over 6,000 acres of active citrus land with various varieties of oranges for juice. We have been in a war against HLB for many years and time is running out for many growers. Just five short years ago we were at over 16,000 active citrus acres. The loss of over 10,000 acres is a direct result of citrus greening. The need is great to resurrect a product that will help us fight multiple pests as well as promote tree health and growth and increase fruit yields.

As a grower we used aldicarb in the past under the registered name of Temik. We are aware that aldicarb requires precise application and safety requirements and I can assure you we are prepared to follow the stringent program in our groves. The reinstatement of aldicarb in the citrus industry is crucial to our survival. We recently suffered major setback due to Hurricane Irma and that toppled with the constant pressure of Citrus Greening has many growers in a fight to stay in business. We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops.

John Gose,

A handwritten signature in black ink that reads 'John Gose'.

General Manager

# Wm. G. Roe & Sons, Inc.

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Blue Lake  
Tru-Tone  
Tru-Type  
Blu-Knight

To: Antoine Puech  
Managing Member AgLogic Chemical LLC  
121 South Estates Drive, Suite 101  
Chapel Hill, NC 27514

From: Bill Roe  
VP Operations Wm. G Roe & Sons Inc.  
Winter Haven, FL 33882

Date: September 28, 2017  
Re: AgLogic 15GG Aldicarb pesticide

Dear Mr Puech:

I am writing this letter in support of the re-registration of Aldicarb as a restricted use pesticide for use on Florida citrus.

Our company Wm G Roe & Sons is a long standing player in the citrus industry in Florida. We own manage or operate approximately 3,000 acres of citrus across various locations throughout the citrus belt. We have a diversified portfolio of varieties which range from Pomelo to Tangerines and our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are the leading shipper of tangerines in the state of Florida and our brand Noble is highly respected in retail and terminal markets. We had used Aldicarb in the form of Temik for many years during the decades of the 80's, 90's, and 2,000's.

At one point during the 90's we were certified commercial applicators in addition to using it on all of our own acreage for which it could be permitted.

As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product.

We recognize that Aldicarb requires a stringent stewardship program to insure its safe and appropriate application. Florida had implemented a rigorous stewardship program through its Dept of Agriculture during the prior application period which required prior site inspections, well set-backs, and application permits specific to site. For many years this program was successfully administered and has a legacy of providing the industry with a proven tool to enhance tree vigor, yield and fruit quality.

As an industry besieged with disease and recent bad weather luck we sorely need this product for use in our groves to offset the deleterious impacts of Greening.

Sincerely,





October 10, 2017

Antoine Puech  
Managing Member  
Aglogic Chemical LLC  
121 S Estates Drive Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

My name is Steve Ryan and I am the President of Citrus Operations for Alico. Our company grows 32,000 acres of citrus throughout Florida. We currently have 250 full time employees as well as several hundred contract laborers.

We have been battling Huanglongbing, aka citrus greening, for several years and have seen our production decline rapidly as a direct result of this disease. One of our primary weapons against the vectors of this disease was Aldicarb which we used until it was taken off the market in 2010. Now is the time to resurrect this product as a much needed tool in our battle to stop the devastating ravages of this disease.

We at Alico understand that this product requires diligent stewardship activities and are committed to ensuring this product is used in a safe and responsible manner. Our company has experience in using millions of pounds of Aldicarb for over 20 years without incident.

The damage caused by Hurricane Irma has only exacerbated our need to have this product available to us as soon as possible. We appreciate the efforts of Aglogic in bringing this product back to the citrus industry. Alico is committed to assisting you however we can in obtaining regulatory approval. It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications.

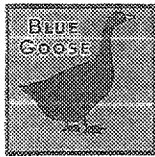
Thank you again for your efforts to get this product reinstated for the citrus industry. It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Ryan", is written over a circular stamp.

Steve Ryan  
President

12010 E Hwy 70  
Arcadia, FL 34266



**Blue  
Goose  
Growers**

**Florida Grove and Crop Management L.L.C**

P.O. Box 14709  
Ft Pierce, FL 34979  
Phone (772) 461-3020  
Fax (772) 468-4669

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S. Estates Dr., Suite 101  
Chapel Hill, NC 27514

**RE: Aldicarb (Temik) Re-Registration**

Dear Mr. Puech:

As General Manager of Blue Goose Growers, a 10,000 acre citrus management company, located on the east coast of Florida, I fully support your effort to re-register Temik for use on citrus in Florida.

As you are aware, our industry is suffering and in need of every available tool to control the spread of citrus greening and make this industry viable again. Allowing Temik to be used again on citrus in Florida will once again allow us to have a familiar product, a product that works, to control the pests that carry diseases that threaten our citrus crops.

Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!

We all genuinely appreciate your effort to expedite this re-registration effort, and look forward to having Temik available for use.

Sincerely Yours,

  
Timothy J. Dooley  
VP/GM, BGG

## Antoine Puech

---

**From:** Marvin Kahn <mkahn@kahngrove.com>  
**Sent:** Friday, November 03, 2017 3:52 PM  
**To:** Antoine Puech  
**Cc:** mikes@flicitrusmutual.com; Andrew Meadows; Trevor Murphy  
**Subject:** Aldicarb

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Good afternoon Mr. Puech,

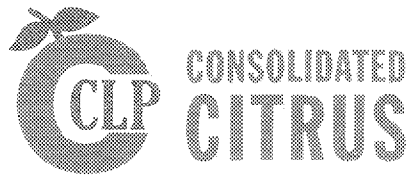
We are a third-generation citrus growing operation, with experience in the industry dating back to the 1930s when my father purchased his first orange grove. We have had experience using Aldicarb in the past and have witnessed firsthand it's positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods. Please let us know if there is anything we can do to assist you in this process.

If you have not heard from the five or so grower organizations CEO's , we or Mike Sparks and Andrew Meadows could help in this regard.

Regards,

Marvin Kahn  
Kahn Citrus Management, LLC  
Murphy Ag Solutions of the Heartland, LLC  
P.O. Box 3346  
Sebring, FL 33871  
863-381-0384 (Cell)  
863-385-6136 (Office)  
863-382-9737 (Fax)





10/20/2017

Michael Stewart, Manager  
Horticultural Services  
Consolidated Citrus LP  
63 Barn Rd.  
Venus, FL 33960

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

In my position as Manager – Horticultural Services for Consolidated Citrus LP, I am writing in support of AgLogic LLC's application to register AgLogic 15GG Aldicarb pesticide for use in citrus in the state of Florida. Consolidated Citrus has nearly 30,000 acres of citrus, making it one of the largest citrus production companies in Florida. I have used Aldicarb, as the branded product Temik, for many years under three different registrants, Union Carbide, Rhone Poulenc and Bayer Crop Science. I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials. If AgLogic 15GG Aldicarb is registered and priced right, Consolidated Citrus would very likely use it for both fresh and processed citrus fruit production. Thank you for your efforts to register this product.

Sincerely yours,

Michael Stewart, Manager  
Horticultural Services

63 Barn Road  
Venus, FL 33960

(p) 863-699-6090  
(f) 863-465-6837



October 13, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

Our company has been growing citrus in central Florida since the 1920's. The fifth generation has just joined us and expanded our farming operation to include blueberries. My two brothers and I manage the day to day farming activities personally meaning our boots are in the groves.

I am writing to support AgLogic Chemical LLC to pursue the registration for AgLogic 15GG Aldicarb for use in Florida citrus. For more than 20 years, Aldicarb (brand name Temik) was one of the most effective inputs to manage a broad range of citrus pests systemically in the tree. This resulted in substantial increases in fruit yields and quality as well as improved growth

The grower community is encouraged by your effort to get an Aldicarb product again registered in Florida citrus. Right now, growers are in the fight of their life against a disease known as HLB, or citrus greening. HLB is a vascular disease vectored by the Asian citrus psyllid (ACP). It is endemic to the state of Florida and it can kill a tree within two years. Our crop has shrunk by more than 66 percent since the onset of HLB.

No cure exists although a massive research effort over the past decade has made headway. Adding Aldicarb back to the toolbox will help slow the spread of the disease through an effective integrated management program. When Temik was registered in Florida citrus, growers followed an intensive stewardship program regulated at both the state and federal level. All application sites were monitored prior to the start of the approved application period. All wells at each site were identified, located, and flagged with a setback. The program clearly showed that Aldicarb can be used safely.

Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid.

Regards,

A handwritten signature in dark ink, appearing to read "John P. Barben".

John P. Barben  
VP, Robert J. Barben, Inc.  
VP, Barben Fruit Co., Inc.



November 3, 2017

Antoine A Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

I am writing this letter to offer my support, and the support of Graves Brothers Company, in the pursuit of re-registration of Aldicarb as a restricted use pesticide on Florida citrus.

Having been raised in Central Florida while working on family owned citrus properties, and as a graduate of The University of Florida Citrus Horticulture Program, I feel that my 30 years of citrus production experience qualifies me to encourage the return of Aldicarb (AgLogic 15GG) pesticide to the Florida Citrus Industry.

I currently manage the agricultural properties owned by Graves Brothers Company. GBC has been involved in Florida agriculture since the 1930's and currently owns and manages 9,000 acres of cattle, timber, vegetable, ornamental and citrus production in Florida. Over the last 70 years Graves Brothers Company has been heavily focused on all phases of the Florida Citrus Industry from nursery tree production through citrus harvesting, packing and sales.

We are struggling, as is the entire Florida Citrus Industry, with the bacterial disease Huanglongbing and its associated vector Asian Citrus Psyllid. The reduction in tree health brought on by this imported disease and its introduced vector has placed our entire industry on the precipice of collapse. Our industry is desperately in need of tools to combat this endemic disease.

Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control.

It is my understanding that Ag Logic 15GG will be labeled for application and use by the same Florida Rule (Rule 5E2.028) as in the past. The history of stewardship of Aldicarb by Florida Citrus Growers under these guidelines has proven that this product can be used safely and without any unacceptable environmental risk. The cadre of growers and applicators that were part of this successful history are more than capable of continuing this legacy in Florida citrus.

Please consider the needs of Graves Brothers Company and more specifically the needs of The Florida Citrus Industry as you endeavor to return this important tool to our diminished grower toolbox.

Sincerely,

David F Howard  
Vice President of Operations  
Graves Brothers Company  
2770 Indian River Boulevard, Suite 201  
Vero Beach, Florida  
Phone: 772.562.3886, Mobile: 772.473 9622

2770 Indian River Blvd; Suite 201, Vero Beach, Florida 32960-4230  
Phone (772) 562-3886 Fax (772) 562-3565  
[www://GravesBrothersCompany.com](http://www.GravesBrothersCompany.com)

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# FLORIDA FERTILIZER COMPANY, INC.

P.O. BOX 1087 • WAUCHULA, FL 33873-1087  
(863) 773-4159 • FAX # (863) 773-9363  
office@flfertilizer.com

October 10, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

My name is Keith Davis. I am a citrus grower, fertilizer and agricultural chemical supplier. I own approximately 175 acres of citrus, and make recommendations for many customers in the citrus industry.

I strongly support AgLogic efforts to register AgLogic 15GG for use on citrus in the state of Florida. As a citrus grower and chemical supplier, with almost 40 years of experience, I have seen firsthand what Aldicarb does for a citrus tree. Aldicarb makes it "Healthy"! Why? It reduces nematodes on the roots, and controls piercing and sucking insects. Aldicarb also increases pound solids of fruit, enables it to handle stress from cold weather, and should help trees survive and be able to withstand the effects of citrus greening (HLB) bacteria.

Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements.

AgLogic 15GG would be a great product to have for Florida citrus, to keep this great industry strong and viable.

Sincerely,



Keith Davis

Message

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**From:** Beck, Nancy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=168ECB5184AC44DE95A913297F353745-BECK, NANCY]  
**Sent:** 7/11/2018 4:37:46 PM  
**To:** Keller, Kaitlin [keller.kaitlin@epa.gov]  
**Subject:** FW: AgLogic Florida SLN [IWOV-PaleyDocs.FID579377]  
**Attachments:** 3588985\_1.pdf; ATT1.pdf; ATT2.pdf

Or this one?

---

Nancy B. Beck, Ph.D., DABT  
Deputy Assistant Administrator, OCSPP  
P: 202-564-1273

**Personal Matters / Ex. 6**

[beck.nancy@epa.gov](mailto:beck.nancy@epa.gov)

---

**From:** Jim Rathvon [mailto:jrathvon@paleyrothman.com]  
**Sent:** Monday, July 2, 2018 2:20 PM  
**To:** Keigwin, Richard <Keigwin.Richard@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>  
**Cc:** Gebken, Richard <Gebken.Richard@epa.gov>; Maignan, Tawanda <Maignan.Tawanda@epa.gov>; Antoine Puech <antoinepuech@meycorp.com>; Cristen S. Rose <crose@paleyrothman.com>; 47788\_0001 \_ Aglogic Chemical\_ LLC Florida Citrus <{F579377}.PaleyDocs@NDM.paleyrothman.com>  
**Subject:** AgLogic Florida SLN [IWOV-PaleyDocs.FID579377]

Dear Mr. Keigwin and Ms. Beck: Attached is a letter on behalf of AgLogic Chemical LLC concerning an issue of great importance to Florida citrus growers and, indirectly, American consumers. Thank you in advance for your attention to this urgent matter.

Respectfully submitted,

Jim Rathvon  
Cristen Rose  
Counsel for AgLogic Chemical LLC

James P. Rathvon  
Attorney At Law  
Bio | Vcard

**PALEY  
ROTHMAN**

4800 Hampden Lane | 6th Floor | Bethesda, MD 20814 | 301-951-9342 | [www.paleyrothman.com](http://www.paleyrothman.com)

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July 2, 2018

**BY ELECTRONIC AND OVERNIGHT MAIL**

Rick Keigwin, Director  
Office of Pesticide Programs  
USEPA Headquarters  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N. W.  
Washington, DC 20460-0001  
([keigwin.richard@epa.gov](mailto:keigwin.richard@epa.gov))

Nancy Beck, Deputy Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
USEPA Headquarters  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N. W.  
Washington, DC 20460-0001  
([beck.nancy@epa.gov](mailto:beck.nancy@epa.gov))

Re: Critically Important Pesticide SLN to Help Embattled Florida Citrus Industry

Dear Sir and Madame:

This letter requests your – and the Agency’s – support for a FIFRA Section 24(c) Special Local Need registration (SLN) for AgLogic 15GG, a granular insecticide containing 15% aldicarb, to control Asian citrus psyllid, citrus rust mites, spider mites, aphids and nematodes on Florida citrus. The SLN application was filed with the Florida Department of Agriculture and Consumer Services (FLDACS) on June 1, 2018 by AgLogic Chemical, LLC, the sole U.S. registrant of aldicarb.

The key facts are these:

1. The Florida citrus industry is on “the brink of annihilation” (Dr. Phillip Stansly, Professor of Entomology, U. Fl., 10/16/17 Letter). It has been ravaged by the citrus greening disease (HLB), transmitted by the Asian citrus psyllid (ACP), and there has been an **80% loss** in production of citrus statewide.<sup>1</sup>
2. Florida growers are losing the battle against the spread of citrus greening disease. At best, the current toolbox of chemical treatments only modestly retards the advance of the disease, but does nothing to improve production. As stated by one grower: “Absent better tools citrus growers will be out of business soon!” (Tim Dooley, Vice President and General Manager, Blue Goose Growers, LLC, 10/11/17 Letter). The intensive use of foliar treatments to fight psyllids has also resulted in other pest problems, including the development of resistance as well as spikes in mite, weevil, and aphid populations.

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<sup>1</sup>. At the time HLB was first discovered in 2003-2004, Florida orange production totaled 242 million boxes. In April 2018, the USDA National Agricultural Statistics Service estimated that just 45 million boxes of oranges would be harvested in 2017-2018 – a decrease of 197 million boxes, or 81%. USDA/NASS, Citrus April Forecast 2017-2018 Season (April 10, 2018) *available at*: [https://www.nass.usda.gov/Statistics\\_by\\_State/Florida/Publications/Citrus/Citrus\\_Forecast/2017-18/cit0418.pdf](https://www.nass.usda.gov/Statistics_by_State/Florida/Publications/Citrus/Citrus_Forecast/2017-18/cit0418.pdf).

3. ***The Florida citrus industry – including the largest growers in the state – enthusiastically support an SLN registration for AgLogic 15GG.*** Indeed, several prominent growers have taken the unusual step of submitting both signed affidavits (Attachment 1) and letters (Attachment 2) detailing why they so urgently need aldicarb.<sup>2</sup> As they explain, a unique attribute of aldicarb is that it stimulates tree health and root growth and ***markedly increases fruit size and yield***, precisely what growers need now to stay in business. Aldicarb is also effective against many pests, including psyllids, mites and nematodes, among others. As one grower has testified: “Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.” (John Gose, General Manager, Lykes Bros. Inc.; 5/17/18 Affidavit).
4. Florida citrus growers are familiar with aldicarb because they used the product (under the trade name, TEMIK 15G) with great results for several decades (~1978-2010), until Bayer, the sole registrant, *voluntarily* cancelled the registration and withdrew from the market, pursuant to a well-publicized corporate decision to exit all WHO Class 1 products.
5. FLDACS has advised AgLogic that it will not approve the SLN unless it is assured that EPA will not disapprove it. It is our understanding that EPA has not yet had the opportunity to review the SLN, attached affidavits and other materials demonstrating the Special Local Need for aldicarb. However, we also understand that there have been early indications by staff members in EPA’s OPP that OPP is inclined to ***deny*** the SLN.

We submit that OPP’s current disinclination to approve the SLN is unjustified and contrary to the public interest. The following points may clarify why we believe this:

6. At the time Bayer cancelled its aldicarb registrations, EPA was concerned about possible dietary risks to infants and children from consumption of food and drinking water containing aldicarb residues. For this reason, AgLogic’s subsequently-obtained registration for AgLogic 15GG, which is approved for use on cotton, peanuts and certain other crops, did not include use on citrus.
7. Over the past several years, aldicarb has undergone Registration Review. During this process, AgLogic implemented significant changes to the product label that result in aggregate dietary exposures to aldicarb well below the 2010 EPA Level of Concern. EPA has recently issued an Interim Registration Review Decision concluding that aldicarb may continue to be registered.
8. To assist the Agency in its assessment of aldicarb, including for use on citrus under a Florida SLN, AgLogic commissioned Dr. Beth Mileson, Principal Scientific Consultant, TSG Consulting, to conduct an acute dietary exposure and risk assessment for aldicarb.

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<sup>2</sup> For convenience, each attachment also includes a cover sheet highlighting relevant excerpts from the affidavits and letters, respectively.

This risk assessment was submitted to EPA earlier this year. Dr. Milesen's affidavit (included in Attachment 1) affirms that she conducted the risk assessment using models and methods identical to those used by EPA's risk assessors. The risk assessment demonstrates that 20% of the US citrus crop may be treated with aldicarb and dietary exposures (including food and water) for all sub-populations are well below any level of concern.

In short, there is no scientific basis for EPA to disapprove the SLN due to dietary risk.

\* \* \*

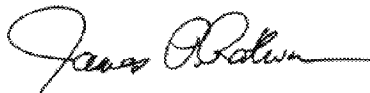
In summary, this SLN is critically important to a Florida citrus industry that desperately needs help. We urge you to take the steps necessary to ensure that OPP makes a full and fair assessment of the SLN, including its substantial benefits to American growers and consumers.

Time is of the essence. Application of AgLogic 15GG must occur during the dry season, which runs from mid-November through April at the latest. Even after the SLN is approved, several additional steps must be taken before applications can occur. Most important, AgLogic must identify applicators that have (or are willing to purchase) the necessary application equipment, and these applicators must be trained to ensure compliance with AgLogic's product stewardship program. Applicators must also petition FLDACS for permission to apply the product. Aldicarb has not been used on citrus since 2011, so considerable lead time is required to restart applications.

In furtherance of the process, AgLogic requests the opportunity to meet with the Agency as soon as possible to discuss the SLN and respond to any questions or concerns OPP may have. Depending on schedule, it is likely that one or more citrus growers and FLDACS officials will attend the meeting as well.

Thank you in advance for your attention to this important matter. Please do not hesitate to contact us if you have any questions or would like to discuss these issues further.

Sincerely,



James P. Rathvon

Cristen S. Rose

Counsel for AgLogic Chemical, LLC

Attachments

cc (by email and overnight mail):

Richard Gebken, OPP

Tawanda Maignan, OPP

Antoine Puech, President/CEO of AgLogic

# **ATTACHMENT 1**

## **Affidavits from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida**

The attached 10 sworn affidavits were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the letters of support that were submitted by these researchers and citrus growers in late 2017.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC – 5/21/18**  
(Also see letter of support from Dr. Philip Stansly, dated 10/16/17)

*Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”*

*One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.*

*Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.*

**2. Walter T. Jerkins, President, Premier Citrus LLC – 5/23/18.**  
(Also see letter of support from Walter T. Jerkins, dated 10/11/17)

*Aldicarb is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.*

*Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.*

*The yield response from the use of aldicarb is robust, resulting in a sustained yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.*

*The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity - precisely the effects that are so desperately needed now by the citrus industry.*

**3. John Gose, General Manager, Lykes Bros. Inc – 5/17/18**  
(Also see letter of support from John Gose, dated 10/2/17)

*Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.*

*A serious drawback of foliar insecticides is that they can wipe out pollinators and other "beneficials" (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.*

*In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly higher pounds of solids per box, producing a very positive net economic return.*

*The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc – 4/27/18**  
(Also see letter of support from William Roe, dated 9/28/17)

*Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest*



*management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.*

*This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both - suppress psyllids and protect beneficials during bloom time - because of its systemic mode of action.*

*Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.*

**5. Dave Owens, Director of Chemical Sales, Alico Citrus -- 5/29/18**

(Also see letter of support from Steve Ryan, President, Alico Citrus, dated 10/10/17)

*Alicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides*

*The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.*

*Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 5/17/18**  
(Also see letter of support from Tim Dooley, dated 10/11/17)

*Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.*

*In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.*

*In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC -- 5/xx/18**  
(Also see letter of support from Marvin Kahn, dated 11/3/17)

*Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better - and are healthier - than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.*

*Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.*

*Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.*

**8. Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP -- 5/23/18**  
(Also see letter of support from Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP, dated 10/20/17)

*When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.*

*The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.*

**9. John Barden, Vice President, Barben Fruit Company Inc – 5/30/18**

(Also see letter of support from John Barden, dated 10/13/17)

*The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ACP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.*

*A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.*

*We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficial when we used aldicarb.*

**10. Dr. Beth Milesen, Principal Scientific Consultant, TSG Consulting – 5/24/18**

*The modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure. Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.*

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF PHILIP A. STANSKY, Ph.D.**

I, Philip A. Stansky, do solemnly swear as follows:

1. I am Professor of Entomology at the University of Florida (UF), Southwest Florida Research and Education Center, 2686 State Road 29 North, Immokalee, FL 34142. I joined UF in 1986, and moved to the Immokalee location in 1989.

2. I hold a Ph.D. in Entomology from Texas A&M (1985), an M.S. in Zoology from the University of Oklahoma (1978), and a B.S. in Zoology from Wayne State University (1967).

3. I am a research and extension entomologist focused on the integrated management of pests affecting major crops grown in southwest Florida, with emphasis on citrus and vegetables. I am the lead author or co-author of more than 538 scientific publications and 158 extension publications in my field, including 172 peer-reviewed articles. I am also the editor of a book and author of 9 book chapters relating to pest management.

4. I develop and test integrated systems of economic and sustainable pest management and their component tactics. I consult with members of the agricultural community, and provide information, training and diagnostic services in collaboration with county and multi-county agents.

5. A key focus of my work for the last 13 years has been and remains the citrus greening disease or huanglongbing (HLB), transmitted by the Asian citrus psyllid (ACP)

*Diaphorina citri*. My work is multifaceted and has included research on the use of aldicarb to control ACP and other citrus pests and to improve citrus yields.

6. Aldicarb (brand name, Temik) was registered for use on citrus in Florida for nearly 30 years until Bayer voluntarily cancelled all of its aldicarb registrations and exited the business at the end of 2010. Subsequently, AgLogic Chemicals, LLC obtained an EPA registration for an aldicarb product similar to Temik, called, AgLogic 15G, labeled for use on several crops not including citrus. AgLogic 15 G was subsequently approved in 2017 for use in Florida on peanuts and cotton by the Florida Department of Agriculture and Consumer Services.

7. I am aware that, at the request of numerous citrus producers, AgLogic Chemicals LLC applied to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG for use on citrus in Florida.

8. In a letter dated October 16, 2017 (attached), I expressed support for this SLN registration in the strongest possible terms. As stated in my letter: “It may not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida’s iconic citrus industry.” Accordingly, I urged that “no effort be spared in registering aldicarb again for citrus in Florida.”

9. I write this Affidavit to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida today.

10. Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”

11. Aldicarb is applied to the soil where it is absorbed by the tree roots and works systemically. As a result, aldicarb provides continuous pest control over an extended period of time, on the order of 90-120 days. At the same time, aldicarb is known to increase root growth, which promotes greater tree health and can lead to larger and more abundant fruit. Our research

cited below from a large scale replicated experiment in a commercial orange grove confirmed increased yield from trees treated with aldicarb. Stansly, P. A., and R. E. Rouse. 1994.

Pest and yield responses of citrus to aldicarb in a flatwoods grove. Proceedings of the Florida State Horticultural Society 107: 69-72.

12. Aldicarb applied through granular applicators below the soil surface has well established integrated pest management and environmental advantages over pesticides that are repeatedly applied through foliar sprays. AgLogic 15 G aldicarb is directly applied into the soil where it is absorbed by the roots, and works systemically against a broad range of pests. As a result, it does not have the same adverse impact as many foliar insecticide sprays on pollinators and other “beneficials” (*e.g.*, wasps, lady beetles, lace wings, and spiders) – which are key to effective integrated pest management programs. The safeguards and stewardship programs that have been adopted over the years for aldicarb provide additional assurance that aldicarb can be used on citrus safely and effectively without harming human health or the environment.

13. The insecticides currently available to citrus growers are, for the most part, applied by ground or aerial spray which may be repeated every 3-4 weeks. Rain events – which are not infrequent during the growing season in Florida – can rapidly wash away these residues, further reducing efficacy. In contrast, once aldicarb is absorbed by the tree roots it will remain active for several months.

14. One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.

15. Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.

16. Another problem faced by citrus growers today is citrus canker. To control canker, growers typically apply a copper-based fungicides at regular intervals. Unfortunately, copper inhibits beneficial mites that control rust mites. As a result, rust mites are a significant problem in many citrus groves where copper has been applied to combat canker. Again, aldicarb is highly effective in providing residual control of rust mites reducing the need for additional sprays.

17. As I noted in my support letter, Florida's iconic citrus industry is in a life or death struggle with HLB for survival. Growers face a host of pest problems, most importantly ACP/HLB, but also rust mites, canker, nematodes, aphids, and others. Hurricane Irma has only exacerbated the difficulties growers now face. In these dire circumstances, growers need more and better management tools, particularly in the face of growing ACP resistance to the neonicotinoids. Aldicarb – a carbamate with a different mode of action– has a proven track record with the Florida citrus industry by providing broad control of psyllids and other important pests while enhancing root growth and fruit production. For all these reasons, I urge the Department to approve an SLN registration for AgLogic 15GG.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on 21 May 2018.

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Philip A. Stansly, Ph.D.

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF WALTER T. JERKINS, JR.**

I, Walter T. Jerkins, Jr., do solemnly swear as follows:

1. I am the President of Premier Citrus and Premier Citrus Management, 635 66<sup>th</sup> Ave. SW, Vero Beach, FL, 32968.

2. Premier is among the largest citrus producers in Florida, managing over 20,000 acres of citrus groves, located in seven (7) counties in Florida. Premier's fresh fruit package house also is one of the largest in Florida.

3. I have more than 40 years of experience in the citrus industry. After graduating from the University of Florida with a major in agriculture in 1975, I worked for about four (4) years at Southern Fruit Distributors, a Florida grower/processor. In 1980, I joined Blue Goose Growers, one of the state's largest grove management company, where I worked for more than 32 years. In 2013, I joined Premier as its President.

4. I am a founding member of Citrus Research and Development Foundation, Inc. (CRDF) and was its first President, a position I held for nine years (2011-Jan. 2018). The CRDF is headed by a 13-member Board of Directors that includes individuals from industry, academia, and government. The CRDF raises money and issues research grants to help companies develop products to combat citrus greening disease (HLB). Through my involvement in CRDF and knowledge of its research, I am well informed about the pest control products currently available



to the citrus industry and products still in the development pipeline. Aldicar is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.

5. I am not aware of any other single product or combination of products that provides the same yield improvement potential to the industry that aldicarb could provide, as discussed below.

6. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.

7. Premier enthusiastically supports AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 11, 2011 (attached), I affirmed Premier's strong support for this SLN registration.

8. The purpose of this Affidavit is to provide further explanation why aldicarb is urgently needed by citrus growers.

9. I have many decades of experience with the use of aldicarb on citrus. During the three decades that I was with Blue Goose Growers, we regularly used aldicarb (Temik) in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently had very positive experiences with aldicarb, which we regarded as a key tool in our arsenal to control insect pests and promote tree growth and fruit production. Year after year we found that when we used aldicarb, trees were healthier and more productive.

10. Premier also used aldicarb very regularly on virtually all of its citrus acres during the many years it was available. Based on my surveying of our grove managers here, Premier's positive experiences with aldicarb were very similar to those of Blue Goose Growers.

11. I have had discussions about aldicarb with many other growers in the industry over the years, including while I was CRDF President. The nearly universal consensus among citrus

producers is that aldicarb is a uniquely valuable product that offers a combination of benefits not provided by any other product or combination of products.

12. Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.

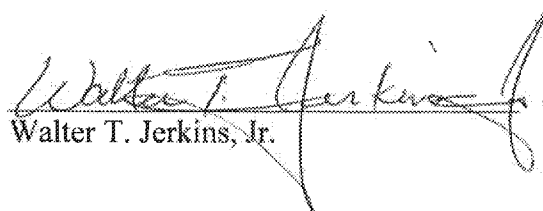
13. The yield response from the use of aldicarb is robust, resulting in a *sustained* yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.

14. The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity – precisely the effects that are so desperately needed now by the citrus industry.

15. For all these reasons, Premier urges the Department in the strongest possible terms to approve AgLogic’s application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.

  
Walter T. Jerkins, Jr.

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF JOHN GOSE**

I, John Gose, do solemnly swear as follows:

1. I am General Manager for Lykes Bros, Inc., 7 Lykes Road, Lake Placid, FL, 33852.
2. Lykes Bros a long-time major player in the Florida citrus industry. We have over 6,000 acres of active citrus groves. Over the last five years we have lost 50% of our citrus acreage due to Citrus Greening.
3. I have more than 40 years of experience in the citrus industry. My family owned citrus groves and I worked in those groves as a teenager. After I graduated from the University of Florida with a degree in agriculture/fruit crops in 1981, I accepted a position at Lykes Bros. I have worked at Lykes Bros in citrus management my entire career.
4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
5. We at Lykes Bros enthusiastically support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 2, 2011 (attached), I affirmed Lykes Bros' strong support for this SLN registration. As stated in my letter: "aldicarb ... is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."

6. The purpose of this Affidavit is to provide further explanation why citrus growers need aldicarb back in their toolbox.

7. Lykes Bros regularly used aldicarb (Temik) in citrus groves we managed for more than two decades, until it was voluntarily withdrawn from the market by Bayer in 2010. We consistently had very positive experiences with aldicarb. Based on our experiences, we consider aldicarb a uniquely valuable product that offers a combination of benefits not provided by any other registered product or combination of products.

8. Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.

9. A serious drawback of foliar insecticides is that they can wipe out pollinators and other “beneficials” (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.

10. In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly *higher pounds of solids per box*, producing a very positive net economic return.

11. The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root

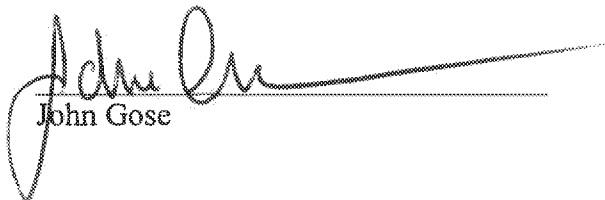
system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.

12. Another serious pest problem associated with citrus production in our groves is root weevils. Citrus greening disease interferes with the transport of sugars and other nutrients from the leaf canopy to the roots through the phloem. To compensate for this, we add nutrients to the soil to help feed the root system. Doing this, however, also supports root weevils (and nematodes). It is not an overstatement to say that root weevils are now a huge problem for Lykes Bros. Aldicarb is needed to combat this problem. When we were able to use aldicarb, we had few problems with root weevils. Root weevil larvae need moisture to come up from the soil and start feeding on the roots. When it was available, we applied aldicarb to soil in November and December. This application timing was perfect for knocking out root weevils before the next fruiting season.

13. For all these reasons, Lykes Bros urges the Department in the strongest possible terms to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 17, 2018.

  
John Gose

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**AFFIDAVIT OF WILLIAM G. ROE II**

I, William (Bill) G. Roe II, do solemnly swear as follows:

1. I am Vice President and Chief Operating Officer for Wm. G. Roe & Sons, Inc. My family has worked in the citrus industry for nearly a century. Wm. G. Roe & Sons, Inc., founded by my grandfather in 1927, is a long-standing player in the Florida citrus industry. We own, manage, or operate approximately 3,000 acres of citrus in various locations across the citrus belt. Our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are perennially one of the top 10 packers in the state. We are also the leading shipper of tangerines in Florida and our brand, Noble, is highly respected in the markets. We have the only private citrus plant breeding program in Florida, which specializes in tangerines.

2. I have more than 40 years of experience in the citrus industry. After graduating from Vanderbilt University in 1975, and taking courses in citriculture at Lake Alfred Citrus Research Station, FL, I began working full-time at Wm G. Roe & Sons in 1976. Prior to that, I worked part-time as a tractor driver and mechanic at the company, starting when I was in high school. I have held several positions at the company, from grove area manager to eventually production manager, a position I held for nearly 20 years. I also worked as our packing house manager for 10 years.

3. I served as President of the Florida Citrus Managers Association from 1986-87, and after appointment to the Florida State PRC, was its Chairman in 1996.

4. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. As stated in my letter dated September 28, 2017 (attached), Wm. G. Roe & Sons strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.

6. Today in Florida we have the benefit of a host of new insecticide chemistries for topical application through spraying. At the same time, Florida has been beset with the citrus greening disease (HLB,) which has manifested itself in a most virulent fashion. Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.

7. This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are

prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both – suppress psyllids and protect beneficials during bloom time – because of its systemic mode of action.

8. While the discussion in the previous paragraph focuses on psyllids, the same point applies to the various members of the scale family, mealybugs, and to some degree leaf miners. Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.

9. A phenomena of the past 12 years since citrus Canker has become endemic in the state has been the necessity of spraying copper every 21 days to control Canker lesions on the peel of many varieties. Canker lesions allow secondary infections to occur in the wounds of the fruit's peel, eventually causing the fruit to drop from the tree, so its control is mandatory for commercial growers. Although we have Streptomycin permitted for topical application and which helps, its application does not allow reduced applications of copper during the growing season. On the down side, application of copper creates a favorable micro-climate for mites to harbor on the peel of the fruit, making them quite difficult to control. When the fruit is quite susceptible during the late spring to Canker, the weather is generally hot and dry, which is perfectly suited for mite build-up even without copper deposits on the surface of the leaves and fruit. Aldicarb provides excellent mite control for an extended period during the spring, is not intrusive to either beneficials or honeybees, and accordingly was one of the reasons why most of the fresh fruit industry used aldicarb when it was available.



10. Another important reason why aldicarb is need by citrus growers today is that it promotes tree health and fruit production – what growers have called a PGR (plant growth regulatory) effect. It is hard to quantitatively assess aldicarb's PGR effect for citrus, but its use causes fruit to have enhanced high peel color and both measurably larger and more uniform size. It could be the combination of aldicarb negating the feeding and sucking of plant bugs and its impact on reducing the nematode population simultaneously, but in any case it is the only chemistry I have used in my 42 years in the industry which enhances the tree's performance and which unquestionably enhances the value of the fruit produced.

11. As growers, we are constantly trying to compensate for the much diminished root system caused by HLB by providing additional fertilizer and nutritional elements. Correspondingly, we are having to apply more foliar copper and leaf nutrients which are exacerbating mite populations. Aldicarb would be a most useful tool for the grower community and the environment by virtue of its providing enhanced control of a broad range of pests while enabling the grower to reduce topical pesticides.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April, 27 2018.

  
William (Bill) G. Roe II

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FIFRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
\_\_\_\_\_)

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FIFRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
\_\_\_\_\_)

**AFFIDAVIT OF DAVID OWENS**

I, David Owens, do solemnly swear as follows:

1. I am the Director of Chemical Sales for Alico Citrus, 12010 Hwy 70, Arcadia, FL, 34266. I have held this position since the end of 2015. My responsibilities at Alico include purchasing from, and liaising with, suppliers of pesticides, fertilizers, and other chemical products for use in citrus.

2. Alico, based in Fort Myers, FL, is among the largest citrus growers in the United States, with some 32,000 acres of citrus groves. In 2017, Alico was the country's largest citrus producer, producing 7.6 million boxes of fruit.

3. Prior to joining Alico, I worked in sales for Rhone Poulenc, and its corporate successors, Aventis and Bayer, for more than 20 years. During this time, I was responsible for the largest sales territory in Florida for the product, Temik, containing aldicarb. My work included talking with growers, interfacing with extension service scientists, and dealing with issues relating to registration, product application, stewardship and other matters. Overall, I have more than 35 years of experience with the citrus industry.

4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. We at Alico strongly support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 10, 2017 from Steve Ryan, President of Citrus Operations (attached), Alico affirmed its support for an SLN registration for aldicarb for citrus. As stated in that letter: "It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications. .... It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated."

6. I and Alico stand by these statements in the October 10, 2017 letter. The purpose of this Affidavit is to explain further why aldicarb is urgently needed by citrus growers, as it fills a need not met by any other product, or combination of products, currently available.

7. Alico has a long, positive history with aldicarb. Alico regularly used aldicarb (Temik) in its citrus groves for at least 20 years, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. Alico's very favorable experiences with aldicarb that spanned decades are the foundation for its strong support for an SLN registration for aldicarb.

8. Aldicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree

growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides.

9. No other product on the market has the same positive effects on tree health and fruit production that Alico – and many other citrus growers – have obtained with the use of aldicarb. During the years Alico used Temik/aldicarb, it realized a very favorable return on its investment in the use of the product year after year.

10. The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.

11. Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.

12. Although there are other products that are labeled for psyllid control, Alico has found that the efficacy of these products for psyllid control has plateaued in recent years. There is great concern at Alico and in the industry that resistance to these chemistries, particularly “neonics” such as imidacloprid, is growing. This is another reason why aldicarb is urgently needed at this time. Aldicarb, a carbamate class pesticide, provides a different mode of action and its use would greatly assist in managing psyllid resistance.

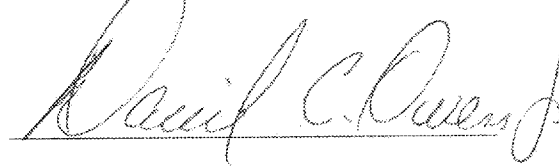
13. Aldicarb also provides well established environmental benefits. Because it is injected into the soil, it poses far less risk of harm to pollinators and other non-target beneficial insects than alternatives that are applied by foliar spray. The ability to use aldicarb would materially reduce the number of foliar applications of pesticides needed to control early season psyllids, and rust mites, greatly reducing the potential adverse impacts of harsher sprays on

beneficials and the environment. Aldicarb also has a much longer residual effect because it is distributed under the soil, and works best in wet soil. In contrast, foliar applications wash out in Florida's frequent rains and have to be repeated more often. It is fair to say that aldicarb is unique when it comes to controlling pests, while also increasing tree vigor and yields. There are also well established benefits of aldicarb on young trees. Aldicarb gives increased root flushes, and promotes the growth of young non-bearing and bearing trees.

14. For all these reasons, I urge the Department to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 29, 2018.

A handwritten signature in dark ink, appearing to read "David C. Owens", written over a horizontal line.

David Owens

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF TIMOTHY J. DOOLEY**

I, Timothy J. Dooley, do solemnly swear as follows:

1. I am the Vice President and General Manager of Blue Goose Growers, a citrus grove and crop management company based in Ft. Pierce, Florida. I have worked for Blue Goose Growers for approximately 27 years.
2. Blue Goose Growers manages approximately 10,000 acres of citrus trees.
3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
4. As stated in my letter dated October 11, 2017 (attached), Blue Goose Growers strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.
5. Citrus growers in Florida, including groves under Blue Goose Growers' management, have a long history of using aldicarb (Temik) successfully to control pests and threaten Florida's citrus crops.

6. Since aldicarb was removed from the market, the health of the Florida citrus industry has declined immensely. HLB is ravaging the industry, and growers are suffering from declining tree health and decreased fruit size and yield.

7. Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.

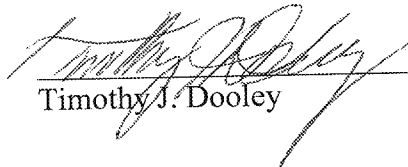
8. In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.

9. In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often.

10. There is no product or combination of products available to citrus growers today that offers the benefits of aldicarb. In addition to the longer residual control it provides, it is critically needed because it controls a wide range of pests, enhances tree health, and increases fruit production.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May, 17, 2018.

  
Timothy J. Dooley

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF )

Application of AgLogic Chemicals, LLC )

For FIFRA § 24(c), Special Local Needs (SLN) )

Registration for )

AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
\_\_\_\_\_)

**AFFIDAVIT OF MARVIN KAHN**

I, Marvin Kahn, do solemnly swear as follows:

1. I am the primary owner of Kahn Citrus Management (KCM), based in Sebring, FL. KCM manages thousands of acres of citrus in Polk, Highlands, Hardee and DeSoto counties, FL.

2. My father entered the citrus industry when he purchased his first orange grove in the 1930s. I have been a part of the citrus industry my entire working life, and have more than 60 years of experience in citrus management. (I just celebrated my 85<sup>th</sup> birthday.)

3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.

4. As stated in my letter dated November 3, 2017 (attached), we at KCM fully support AgLogic's SLN application. Our support for this SLN registration is based on decades of favorable experiences that we have had with aldicarb (Temik), up until the end of 2010, when it was voluntarily withdrawn from the market by Bayer.

5. The purpose of this Affidavit is to explain further why aldicarb is so urgently needed by KCM and other citrus growers in Florida.

6. Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including



nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better – and are healthier – than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.


7. Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.

8. Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.

9. In summary, if aldicarb were available, growers would be able to control psyllids, rust mites, and other pests with fewer foliar sprays involving harsher chemistries. Overall, trees would be healthier and more productive, and there would be less damage to honeybees and other beneficials.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April \_\_, 2018.

  
\_\_\_\_\_  
Marvin Kahn

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF \_\_\_\_\_) )  
Application of AgLogic Chemicals, LLC \_\_\_\_\_) )  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_) )  
Registration for \_\_\_\_\_) )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_) )  
\_\_\_\_\_)

**AFFIDAVIT OF CODY LASTINGER**

I, Cody Lastinger, do solemnly swear as follows:

1. I hold the position of Manager – Horticultural Services for Consolidated Citrus, LP (“Consolidated”), 63 Barn Road, Venus, FL 33960. Consolidated is among the largest citrus producers in the United States, with some 30,000 acres of citrus groves.

2. I graduated from the University of Florida in 2013 with a Master’s in Agronomy and Weed Science. I received a second Master’s in Aquatic Plant Management from the University of Florida Gainesville in 2017. I became Manager – Horticultural Services at Consolidated very recently, after the former long-time Manager, Michael J. Stewart, recently retired.

3. I am aware that AgLogic is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG aldicarb pesticide for use on citrus in Florida.

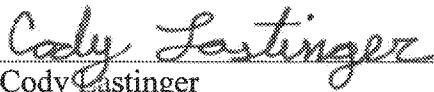
4. In a letter dated October 20, 2017 (attached), former manager Michael Stewart expressed Consolidated’s strong support for this SLN registration. This support is based on Consolidated’s many decades of favorable experiences with aldicarb (brand name, Temik), up through 2010, when it was voluntarily cancelled by Bayer. As stated in our October 20, 2017 letter: “When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective

pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.”

5. The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 23, 2018.

  
Cody Lastinger

BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES

)  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FIFRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
)

**AFFIDAVIT OF ROBERT H. BARBEN AND JOHN P. BARBEN**

We, Robert H. Barben and John P. Barben, do solemnly swear as follows:

1. I, Robert H. Barben, am President and I, John P. Barben, am Vice President, of Robert J. Barben, Inc., 21 East Pine Street, Avon Park, FL 33825. Robert J. Barben, Inc. is a family business that traces its origins back to the 1920s. We have been in the business of growing and managing citrus for many decades. We currently manage about 1800 acres of citrus located in four counties in Florida.

2. We are aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

3. We at Robert J. Barben, Inc. strongly support AgLogic's SLN application for the use of aldicarb on citrus. In a letter dated October 13, 2017 (attached), we affirmed our unqualified support for this SLN registration.

4. The purpose of this Affidavit is to provide further explanation as to why aldicarb is urgently needed by Florida citrus growers today.

5. Our company has extensive experience with the use of aldicarb on citrus. During the 2-3 decades that aldicarb (brand name, Temik) was available to us, we used it regularly in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently saw very positive results with aldicarb. We found that when we used aldicarb, trees were healthier and more productive.

6. The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them.

7. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ASP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.

8. A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.

9. We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficials when we used aldicarb. Aldicarb is applied to the soil, not topically, and works systemically, so there is far less direct

exposure to beneficials with aldicarb.

10. The addition of aldicarb, which is a carbamate with a different mode of action, would be very helpful to citrus growers in managing pesticide resistance.

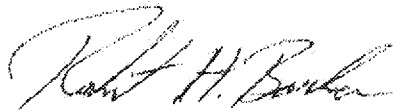
11. If aldicarb were available, we would apply it to the soil in winter months. This would enable us to reduce the number of foliar sprays by at least 2-3 during the spring months, which would reduce adverse impacts on beneficials.

12. Another reason why we urgently need aldicarb back is that it aldicarb increases root growth and fruit production. In our experience, using aldicarb is like giving the tree a steroid; the trees are healthier and there is a very definite growth response. Even more important economically, aldicarb increases the *pounds solids* produced by the tree. No other product compares to aldicarb in stimulating tree growth and fruit production.

13. In summary, aldicarb offers a unique combination of benefits not offered by any other single registered product or combination of registered products. These benefits include broad, long-lasting control of rust mites, minimal impacts on beneficials, and increased tree health and fruit production. These benefits are urgently needed by citrus growers now, more than ever. For these reasons, Robert J. Barben, Inc. urges the Department to approve an SLN registration for AgLogic 15 GG.

We declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.



Robert H. Barben



John P. Barben

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF BETH E. MILESON, PH.D.**

I, Beth E. Milesen, do solemnly swear as follows:

1. I hold the position of Principal Scientific Consultant, Team Leader, Toxicology at Technology Sciences Group, Inc. (TSG), based in TSG's office at 1101 17<sup>th</sup> Street, N.W., Suite 500, Washington, D.C., 20036. I have worked at TSG since 2001,
2. TSG is a part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG).
3. A copy of my Curriculum Vitae is attached. As reflected therein, I received a Ph.D. in Toxicology from the University of North Carolina in Chapel Hill in 1989. I also hold a Bachelor of Science in Biology/Zoology and Master of Science in Biology from George Washington University, as well as a Masters in Business Administration from George Mason University.
4. I am and have been a board-certified toxicologist, otherwise known as a Diplomate of the American Board of Toxicology, continuously since 1996.
5. I have more than 20 years of experience designing, conducting and reviewing toxicological risk assessments.
6. AgLogic asked me to conduct an acute aggregate dietary exposure and risk assessment for aldicarb using the Dietary Exposure Evaluation Model software with the Food

Commodity Intake Database (DEEM-FCID) using methods identical to those used by the U.S. Environmental Protection Agency (US EPA) in its assessment in 2016.<sup>1</sup>

7. The exposure assessment I conducted for AgLogic was intended to estimate potential exposure of the general US population and all sub-populations to aldicarb assuming that 20% of the US citrus crop is treated with aldicarb. For this assessment I used as a starting point the basic data files and assumptions provided by the US EPA in 2016. In addition to the assumed use of aldicarb on 20% of the citrus crop, two assumptions in my aggregate exposure assessment differed from the US EPA: (1) The US EPA assumed that 100% of the imported crops supported by tolerances are treated with aldicarb, while I assumed that no aldicarb residues were in/on imported crops because aldicarb is not registered anywhere outside the US. (2) The aldicarb residue levels in water that I used in the exposure assessment were provided in a report prepared by Waterborne Environmental for AgLogic.<sup>2</sup> The DEEM modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions as described above.

8. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure.<sup>3</sup> Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results

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<sup>1</sup> US EPA, 2016. Memorandum: Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessments for Registration Review Risk Assessment. From: Ideliz Negrón-Encarnación, to: Susan Bartow. PC Code: 098301, DP Barcode: D430197, Office of Pesticide Programs, Office of Chemical Safety and Pollution Prevention, US Environmental Protection Agency, 3/28/2016. 34 pages.

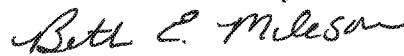
<sup>2</sup> Ritter, A.M. 2017. Aldicarb: Drinking Water Exposure Assessment. Unpublished report by Waterborne Environmental Inc. Study No.: 245.01. November 14, 2017. 22 pages. MRID 50549101.

<sup>3</sup> Milesen, B.E. 2017. Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessment for Proposed Uses. Unpublished report by Technology Sciences Group, Inc. Document No.: 20170230. December 28, 2017. 27 pages. MRID 50549102.

in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 24, 2018.

A handwritten signature in cursive script, appearing to read "Beth E. Miles".

---

Beth E. Miles



# Curriculum Vitae Beth E Milesen

## **Beth E. Milesen, Ph.D., DABT**

Technology Sciences Group Inc.

Washington, DC 20036

Phone: (202) 828-8956

email: bmilesen@tsgusa.com

## **EDUCATION**

MBA, George Mason University, Fairfax, VA, (2013)

PhD, Toxicology, University of North Carolina, Chapel Hill, NC (1989)

MS, Biology/Zoology, George Washington University, Washington, DC (1984)

BA, Biology, George Washington University, Washington, DC (1981)

## **PROFESSIONAL EXPERIENCE**

### **Technology Sciences Group Inc. (TSG)**

**2001 to Present**

*Technology Sciences Group Inc. is part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG), and provides state, federal and international expertise on a wide range of scientific and regulatory issues. With experts in regulatory affairs, chemistry, toxicology, environmental fate and risk assessment, TSG provides services in support of the development, registration, compliance and defense of chemically related products. Clients include chemical, pesticide, consumer product, food, personal care and animal health companies, as well as industry groups, trade associations, and law firms.*

### **Principal Scientific Consultant, Team Leader**

#### **Responsibilities include:**

- Create comprehensive toxicology and risk assessment strategies to inform clients' business decisions and achieve their regulatory goals;
- Design and conduct human health and ecological risk assessments to support product stewardship, registrations and certifications;
- Meet with federal and state officials and stakeholder groups to discuss and resolve scientific issues;
- Design toxicology testing programs and testing strategies to support new and existing products;
- Support TSG management and staff in scientific and administrative matters.
- Clients include large producers and marketers of consumer products, chemicals and pesticides, as well as a number of small businesses, biotech firms, and trade associations.

### **ARCADIS**

**2000 to 2001**

*ARCADIS is an international company that provides consultancy, design, engineering and management services in the fields of Infrastructure, Water, Environment and Buildings. With more than 22,000 employees and more than \$3.3B in revenues the company has an extensive international network that is supported by strong local market positions.*

## Curriculum Vitae Beth E Milesen

### Principal Scientist

#### Responsibilities included:

- Develop toxicological and human health risk assessments for site-specific and chemical-specific scenarios,
- Develop and maintain client relationships,
- Mentor junior staff.

### **ILSI Risk Science Institute**

**1996 to 2000**

*The International Life Sciences Institute (ILSI) is a nonprofit, worldwide organization whose mission is to provide science that improves public health and well-being. It achieves this mission by fostering collaboration among experts from academia, government, and industry on conducting, gathering, summarizing, and disseminating science. Its activities focus primarily on nutrition and health promotion; food safety; risk assessment; and the environment.*

### Senior Scientist

#### Responsibilities included:

- Design and implement programs to advance the scientific basis of risk assessment;
- Create proposals outlining goals and objectives, strategic plans and budgets necessary to complete projects;
- Collaborate with scientists from U.S. and international agencies and organizations including the U.S. Environmental Protection Agency, Food and Drug Administration and Organization for Economic Cooperation and Development;
- Direct and chair working groups composed of scientists from academia, industry, government and public interest groups and stimulate them to reach consensus on difficult scientific issues.

#### Projects included:

1. Develop principles to determine what constitutes a common mechanism of toxicity;
2. Develop guidance for the design and interpretation of studies to characterize acetylcholinesterase activity in the peripheral nervous system;
3. Develop a framework for cumulative risk assessment; and
4. Evaluate experimental methods to identify and characterize developmental neurotoxicity.

### **NC Department of Environment & Natural Resources**

**1992 to 1996**

*The North Carolina Department of Environment and Natural Resources (DENR) Division of Air Quality (DAQ) works to protect and improve outdoor, or ambient, air quality in North Carolina for the health, benefit and economic well-being of all. To carry out this mission, the DAQ operates a statewide air quality monitoring network to measure the level of pollutants in the outdoor air, develops and implements plans to meet future air quality initiatives, assures compliance with air quality rules, and educates, informs and assists the public with regard to air quality issues.*

### Toxicologist

#### Responsibilities included:

- Design, conduct, and interpret large-scale ambient sampling studies used to characterize concentrations of toxic air pollutants and assess citizen exposure and risk,
- Direct the DENR Secretary's Scientific Advisory Board on Toxic Air Pollutants (SAB),
  - Work with scientists from research institutions, universities, government and industry;
  - Identify toxic air pollutants (TAPs) of concern to North Carolina;

## Curriculum Vitae Beth E Milesen

- Conduct risk assessments for TAPs based on primary literature.

### **Projects included:**

1. Design and direct large-scale ambient monitoring studies to measure TAPs emitted by petroleum terminals, wood furniture manufacturing facilities and polyurethane foam producing facilities;
2. Assess potential human exposure to emissions from hazardous waste-burning incinerators, phosphate mining operations, petroleum terminals and furniture manufacturing facilities based on measured ambient levels and modeled concentrations of TAPs;
3. Prepare risk assessments and derive acceptable ambient levels (AALs) for many toxicants, including, allyl chloride, toluene diisocyanate, methylene chloride and formaldehyde.

### **Duke University Medical Center**

**1989 to 1991**

*Duke University has about 13,000 undergraduate and graduate students and a world-class faculty helping to expand the frontiers of knowledge.*

### **Research Associate, Department of Pharmacology and the Center for the Study of Aging**

#### **Responsibilities included:**

- Design and conduct behavioral, neurochemical and neuropharmacologic studies to determine toxicologic mechanisms involved in selective neuronal degeneration that occurs following transient forebrain ischemia, an animal model of stroke;
- Supervise undergraduate and graduate students and technical staff.

#### **Projects included:**

1. Complete three comprehensive studies on neuronal degeneration,
2. Publish the results in the peer-reviewed literature;
3. Fulfill postdoctoral training in sociology, physiology, cardiology, and disease in aging populations.

### **University of North Carolina- Chapel Hill**

**1985 to 1989**

*The University of North Carolina at Chapel Hill prides itself as the nation's first public university, serving North Carolina, the United States and the world through teaching, research and public service.*

### **Doctoral candidate, Curriculum in Toxicology in the Medical School of UNC – Chapel Hill**

#### **Responsibilities included:**

- Conduct research in Dr. Richard Mailman's Neurotoxicology Laboratory on the effects of toxicants on brain dopamine neurotransmission in rats;
- Train and supervise laboratory technicians.

# Curriculum Vitae Beth E Mileson

## **George Washington University**

**1980 to 1984**

*The George Washington University is located in the nation's capital and is an institution with a history of dedication to educating and preparing future leaders.*

### **Master's degree candidate, Department of Biological Sciences**

- Conduct research in Dr. Randall Packer's laboratory to determine how acid-base balance in tropical land crabs is affected by changing environmental temperature;
- Teach human and advanced human physiology to undergraduate students.

### **Undergraduate Student Researcher, Department of Biological Sciences**

- Conduct undergraduate research in the laboratory of Dr. John Burns, to determine the seasonal variation in the reproductive biology of tropical poeciliid fish in the absence of significant seasonal changes in day-length.

## **CERTIFICATIONS**

Diplomate of the American Board of Toxicology, 1996; recertified: 2001, 2006, 2011, 2016

## **PROFESSIONAL MEMBERSHIPS**

Society for Risk Analysis  
Society for Neuroscience  
Society of Toxicology  
American Association for the Advancement of Science

## **INVITED PARTICIPANT IN WORKING GROUPS/TASK FORCES**

- **Workshop:** Risk Assessment Methodologies Workshop on Approaches to Weight of the Evidence Evaluation in Risk Assessment, ILSI Health and Environmental Sciences Institute, December 2006.
- **Working Group:** Food Safety in Europe: Risk Assessment of Contaminants in Food, **European Union Concerted Action and ILSI Europe**, January-October 2000
- **Workshop:** Threshold of Toxicological Concern, **ILSI Europe**, October 1999
- **Workshop:** The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- **Working meeting** for development of Total Risk Integrated Model, **U.S. EPA**, June 1996
- **Workshop:** Mechanism-based Toxicology in Cancer Risk Assessment: Implications for Research, Regulation and Legislation, **National Toxicology Program**, January 1995
- **Working Group:** Board of Scientific Counselors Ad Hoc Working Group to review the Criteria for Listing Carcinogens, **National Toxicology Program**, April 1995
- Task Force on Risk-Based Protocol for Determination of Soil and Water Clean-up Levels, **NC Department of Environment and Natural Resources**, 1995-1996

## Curriculum Vitae Beth E Mileson

- Ad Hoc Committee for Air Quality Standards **ACGIH**, 1995
- Air Toxics Committee member, **State and Territorial Air Pollution Program Administrators (STAPPA) and Association of Local Air Pollution Control Officials (ALAPCO)**, 1994-1996

### INVITED PRESENTATIONS

- *Cumulative Risk Assessment of OP Pesticides in the Diet based on a Probabilistic Method for Exposure Assessment.* at the Asia-Wide Symposium on Risk Assessment of Contaminants in Food, Seoul, South Korea, **Korea Food and Drug Administration**, November 1999
- *A Framework for Cumulative Risk Assessment* at the workshop: The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- *A Comparison of Three Methods to Cumulate Risk Due to Exposure to Multiple Chemicals that Act by a Common Mechanism of Toxicity.* **American Crop Protection Association**, December 1998
- *Common Mechanism of Toxicity, Report of the ILSI RSI Working Group.* **EPA FIFRA Scientific Advisory Panel**, 1998
- *Common Mechanism of Toxicity: A Case Study of OP Pesticides* **EPA OPP Pesticide Program Dialogue Committee**, 1998
- *Procedures and Functions of the Secretary's Scientific Advisory Board on Toxic Air Pollutants.* **NC Legislative Committee on Air Quality** 1996
- *Monthly Briefing* Air Quality Committee of the **North Carolina Environmental Management Commission**, 1995-1996
- *Investigation of Bulk Gasoline Terminals at Paw Creek, Mecklenberg County, NC.* **NC Legislative Environmental Review Committee**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation,* **Press Conference**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation,* **Public Meeting**, February 1994
- *Reconciliation of the NC Regulations for Control of Toxic Air Pollutants with the Federal Clean Air Act of 1990.* **NC Aggregates Association**, May 1993 and **Guilford County LEPC Industry Forum Meeting**, May 1993

### ADDITIONAL PROFESSIONAL ACTIVITIES

- Partner with ILSI Europe on **A European Commission Concerted Action** on Risk Assessment of Chemicals in Food and Diet, April, 2000-February 2001
- Organized and chaired a symposium on Cumulative Risk Assessment at the **Society for Risk Analysis Annual Meeting**, December 1999
- Nominated as a potential member of the **EPA FIFRA Scientific Advisory Panel** (declined due to participation in ILSI activities germane to issues considered by the SAP) October, 1997
- Member of the Editorial Advisory Board, **Reviews in Toxicology**, **IOS Press** (2001).

**FULL LENGTH REFEREED PUBLICATIONS**

1. Milesen, B.E., Packer, R.K., 1986. Hemolymph acid base balance in the terrestrial crab, *Gecarcinus ruricola*, with changing environmental temperature. **Comp. Biochem. Physiol.** 85A:4;715719.
2. Milesen, B.E., Schwartz, R.D., 1991. The use of locomotor activity as a behavioral screen for neuronal damage following transient forebrain ischemia in gerbils. **Neuroscience Letters** 128; 71-76.
3. Milesen, B.E., Lewis, M.H., Mailman, R.B., 1991. Dopamine receptor "supersensitivity" occurring without receptor up-regulation. **Brain Research**, 561; 1-10.
4. Schwartz, R.D., Yu, X., Wagner, J., Ehrmann, M., Milesen, B.E., 1992. Cellular regulation of the benzodiazepine/GABA receptor: arachidonic acid, calcium, and cerebral ischemia. **Neuropsychopharmacology**, 6; 119-125.
5. Milesen, B.E., Ehrmann, M.L., Schwartz, R.D., 1992. Alterations in the GABA-gated chloride channel following transient forebrain ischemia in the gerbil. **Journal of Neurochemistry**, 58; 600-607.
6. Lawler, C.P., Gilmore, J.H., Mooney, D.H., Mayleben, M.A., Atashi, J.R., Milesen, B.E., Wyrick, S.D., Mailman, R.B., 1993. A rapid and efficient method for the radiosynthesis and purification of [125I]SCH23982. **Journal of Neuroscience Methods**, 49; 141-153.
7. Milesen, B.E., Chambers, J.E., Chen, W.L., Dettbarn, W., Ehrich, M., Eldefrawi, A.T., Gaylor, D.W., Hamernik, K., Hodgson, E., Karczmar, A.G., Padilla, S., Pope, C.N., Richardson, R.J., Saunders, D.R., Sheets, L.P., Sultatos, L.G., Wallace, K.B., 1998. Common mechanism of toxicity: A case study of organophosphorus pesticides. **Toxicological Sciences**, 41; 8-20.
8. Milesen, B.E., Chambers, J.E., Ehrich, M., Hamernik, K., Hodgson, E., Reith, J.P., Saunders, D.R., Sheets, L.P., Sultatos, L.G., Van pelt, C., Wallace, K.B., 1999/2000 Common mechanism of toxicity: evaluation of carbamate pesticides. **Reviews in Toxicology**, 3; 127-138.
9. Milesen, B.E., Ferenc, S.A., 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment: overview. **Environmental Health Perspectives**, 109 (suppl 1); 77-78.
10. Cory-Slechta, D.A., Crofton, K.M., Foran, J.A., Sheets, L.P., Ross, J.F., Weiss, B., **Milesen, B.E.** 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment. II: behavioral considerations. **Environmental Health Perspectives**, 109 (suppl 1); 79-91
11. Dorman, D.C., Allen, S.L., Byczkowski, J.Z., Claudio, L., Fisher, J.E., Fisher, J.W., Harry, G.J., Li, A.A., Makris, S.L., Padilla, S., Sultatos, L.G., **Milesen, B.E.** 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment. III: Pharmacokinetic and pharmacodynamic considerations. **Environmental Health Perspectives**, 109 (suppl 1);101-111.
12. Edler L, Poirier K, Dourson M, Kleiner J, **Milesen B**, Nordmann H, Renwick A, Slob W, Walton K, Wurtzen G. 2002. Mathematical modeling and quantitative methods. **Food Chem Toxicol.** 40(2-3):283-326.

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13. Gargas M.L., Kinzell J.H., Milesen B.E. 2009. Foreword to a special issue of Inhalation Toxicology on a risk assessment for iodomethane. **Inhal Toxicol.** 21(05-07); 447.
14. Milesen B.E., Sweeney L.M., Gargas M.L., Kinzell J.H. 2009. Iodomethane Human Health Risk Characterization. **Inhal Toxicol.** 21(05-07); 583-605.

### BOOK CHAPTERS AND NONREFEREED PUBLICATIONS

1. Mailman, R.B., Milesen, B.E., Lewis, M.H., 1987. Neurotoxicity expressed through alterations of cell cell interaction. in: **Biochemical mechanisms and regulation of intracellular communication.** Princeton Scientific Publishing, Princeton, N.J. pp 97112.
2. Milesen, B.E., Hedrick, M., 1996. Evaluation of emissions from a bulk petroleum terminal cluster in Mecklenberg County, NC. **Air & Waste Management Meeting Proceedings, 1995 meeting.**
3. Milesen, B.E., 1996. Investigation of toxic air pollutants emitted by wood furniture manufacturing facilities in Caldwell County, North Carolina. **NC DEHNR Air Quality Investigation Report**
4. Milesen, B.E., 2001. Guest Perspective: EPA Pesticide Cumulative Risk Model Evolution Continues. **Risk Policy Report.** Volume 8 (10) 30-32.

### ABSTRACTS

1. Gatzky, J.T., Milesen, B.E., 1986. Permeability of excised rat urinary bladder and separation of the urothelium. **ASPET-SOT Abstract.**
2. Milesen, B.E., Lewis, M.H., Mailman, R.B., 1987. Regulation of dopamine receptor sensitivity: effects of 1-methyl-4-phenylpyridinium on priming. **Soc. Neuroscience Abstracts** 13; 27.20.
3. Lewis, M.H., Keresztury, M.F., Walker, Q.D., Cook, L.S., Milesen, B.E. Mailman, R.B., 1987. Diabetes-induced polydipsia in rats: dependence on intact dopamine function and mediation by central insulin. **Soc. Neuroscience Abstracts** 13; 67.13.
4. Milesen, B.E., Mailman, R.B., 1988. Disparate consequences of two distinct 6-hydroxydopamine (6-OHDA) brain lesions in rats. **The Toxicologist** Feb. 1988. Abstract
5. Milesen, B.E., Mailman, R.B., 1988. Comparison of behavioral and biochemical consequences of two distinct models of central dopaminergic denervation supersensitivity. **Soc. Neuroscience Abstracts** 14; 375.2.
6. Milesen, B.E., Mailman, R.B., 1989. Autoradiographic evaluation of D1 and D2 dopamine receptors following central dopaminergic denervation. **Soc. Neuroscience Abstracts** 15; 236.7.

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7. Milesen, B.E. and Schwartz, R.D., 1990. Effects of bilateral carotid occlusion (BCO) on GABA<sub>A</sub> receptor function in Mongolian gerbil brain. **Soc. Neuroscience Abstracts** 16; 385.14.
8. Ehrmann, M.L., Milesen, B.E., Edgar, P.P., Schwartz, R.D., 1990. Effects of bilateral carotid occlusion (BCO) on the GABA<sub>A</sub> receptor/chloride channel in Mongolian gerbil brain: autoradiography using <sup>35</sup>S-TBPS. **Soc. Neuroscience Abstracts** 16; 385.15.
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# **ATTACHMENT 2**

## Letters from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida

The attached 11 letters were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the sworn affidavits that were submitted by these researchers and citrus growers.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC -- 10/16/17**

(Also see the sworn affidavit from Dr. Philip Stansly, dated 5/21/18)

*"There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane."*

**2. Walter T. Jerkins, President, Premier Citrus LLC -- 10/11/17**

(Also see the sworn affidavit from Walter T. Jerkins, dated 5/23/18)

*"Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus."*

**3. John Gose, General Manager, Lykes Bros. Inc -- 10/2/17**

(Also see the sworn affidavit from John Gose, dated 5/17/18)

*"We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc -- 9/28/17**

(Also see the sworn affidavit from William Roe, dated 4/27/18)

*"As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant*

*and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product.”*

**5. Steve Ryan, President, Alico Citrus -- 10/10/17**

(Also see the sworn affidavit from Dave Owens, Director of Chemical Sales, Alico Citrus, dated 5/29/18)

*“As a fresh fruit packer we recognize Aldicarb’s extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product.”*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 10/11/17**

(Also see the sworn affidavit from Tim Dooley, dated 5/17/18)

*“Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!”*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC – 11/3/17**

(Also see the sworn affidavit from Marvin Kahn, dated 5/xx/18)

*“We have had experience using Aldicarb in the past and have witnessed firsthand its positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods.”*

**8. Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP – 10/20/17**

(Also see the sworn affidavit from Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP, dated 5/23/18)

*“I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers*

*who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials."*

**9. John Barden, Vice President, Barben Fruit Company Inc – 10/13/17**

(Also see the sworn affidavit from John Barden, dated 5/30/18)

*"Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid."*

**10. David Howard, Vice President Operations, Graves Brothers Company – 11/3/17**

*"Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control."*

**11. Keith Davis, Owner, Florida Fertilizer Company Inc -- 10/10/17**

*"Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements."*

Southwest Florida Research and Education Center  
2686 State Road 29 North  
Immokalee, FL 34142-9515

239-658-3400  
239-658-3469 Fax  
<http://swfrec.ifas.ufl.edu>

To: Antoine A. Puech, Managing Member, AgLogic Chemical LLC  
From: Dr. Philip A. Stansly, [pstansly@ufl.edu](mailto:pstansly@ufl.edu)  
Cc: Ron Hamel, Gulf Citrus Growers Association  
Date: 16 October 2017  
Subject: Re-registration of aldicarb

Dear Sir,

By means of this memo I would like to express my full support for the re-registration of Aldicarb in citrus. I am a research and extension entomologist working on citrus at this Center since 1989. My appointment is state wide with emphasis of the southwest growing regions which comprises about 25% of total citrus production in the state. During this time I have had considerable experience working with aldicarb, both pre and post greening (HLB) as you can see from the citations below. In my estimation aldicarb is an excellent product both in terms of efficacy as well as environmental and personal safety, thanks to the safeguards and stewardship actually in place.

There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane. Therefore, I urge that no effort be spared in registering aldicarb again for citrus in Florida and elsewhere in the US wherever citrus is grown. Please feel free to contact me for any additional information with respect to this issue.

Best Regards,

Digitally signed by Phil Stansly  
DN: cn=Phil Stansly, o=UF-IFAS, ou=SWFREC,  
email=pstansly@ufl.edu, c=US  
Date: 2017.10.16 11:58:17 -04'00'

Philip A. Stansly  
Professor of Entomology

**References cited:**

Stansly, P. A., and R. E. Rouse. 1994. Pest and yield responses of citrus to Aldicarb in a flatwoods grove. *Proceedings of the Florida State Horticultural Society* 107: 69-72.

Stansly, P. A., and R. E. Rouse. 1994. Pest and yield responses to Temik in southwest Florida's flatwoods - Year 2. *Citrus and Vegetable Magazine* 57: 6-7.

Croxtan, S. D., T. L. Stansly and P. A. Stansly. 2012. Timing of temik and movento applications for control of Asian citrus psyllid (ACP) *Diaphorina citri*, 2010. *Arthropod Management Tests*, 37: D1

Qureshi, J. A., and P. A. Stansly. 2008. Rate, placement and timing of aldicarb applications to control Asian citrus psyllid, *Diaphorina citri* Kuwayama (Hemiptera: Psyllidae), in oranges. *Pest Management Science* 64: 1159-1169.



P.O. BOX 690759  
Vero Beach, FL 32969

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 So Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech;

I am writing this letter with the intent to offer my full support as well as the full support of all of Premier's citrus related companies and clients in Florida for the re-registration of Aldicarb as a restricted use pesticide in Florida.

I currently serve as President of Premier Citrus and Premier Citrus Management, and together these companies have directly managed over 20,000 acres of citrus annually, in seven different Florida counties since 2005. Premier also operates one of the industry's largest fresh fruit packing houses, as well as one of the largest fresh citrus marketing companies. Prior to working with Premier, I managed the state's largest grove management company, Blue Goose Growers all the way back to 1980, including the Dole Citrus activities between 1983 and 2000.

My experience in crop management goes all the way back to 1975, but closer to 1980 when I first became actively involved and responsible for the selection and use of citrus pesticides. Since Aldicarb first became available in Florida, we used the product on practically all of our managed acres at the labeled rate due to the easiest of all metrics to track: higher earnings.

Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus.

Improved yields were most often a result of improved size, which always carries a premium in the fresh fruit business. That size improvement as well as overall blemish control was easily noticed in the packinghouse and drove more favorable size and quality packages, again driving up revenues for fresh fruit as well as juice fruit.

In fact, the product was so important to our annual production plan that actively participating in complying with the Stewardship program was a high company priority to insure

that by our safe use we could help the registrant keep the product available out into the future. It was a major disappointment when Bayer voluntarily pulled the label in 2010, and we believe strongly that its discontinued use and loss of the PGR and other effects coincided and contributed to both our company and the Florida industry yield decline as the additional pressure of ACP and HLB expanded and has contributed to this day.

Premier's current nucleus of excellent grove managers happen to be the remnants of one of the industry's largest Aldicarb applicators prior to 2010, and we have access to those same machines now. Together with those machines and experienced managers and applicators, Premier could be in the application business as quickly as anyone, as we have the weight of the grove financial base also pushing for this application capability.

The availability of Aldicarb will be a valuable offset to the nagging weak tree health that continues to suffocate our yields. HLB has the Florida industry on its heels, and with the last hurricane, it's fair to say we're desperate to obtain any tools that can even incrementally get us back to improved productivity and revenues to keep us in business.

Please keep up your best effort to obtain a registration by whatever means necessary, and consider Premier a strong supporter willing to help you at every turn.

Thank you for considering our need and our support of your pursuit of the use of Aldicarb for Florida citrus growers.

A handwritten signature in black ink, appearing to read "Walter T. Jerkins, Jr.", with a stylized flourish at the end.

Walter T. Jerkins, Jr.  
President, Premier Citrus, LLC  
625 66th Ave SW, 32968  
Vero Beach, Florida  
Ph: 772-469-1549, Mobile: 772-473-9754



# LYKES BROS. INC.

7 Lykes Road  
Lake Placid, FL 33852-9582



Telephone: (863) 465-4127  
FAX: (863) 465-2289

To: Antoine Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

October 2, 2017

Dear Mr. Puech,

My name is John Gose and I am the General Manager for Lykes Bros. Inc. Our company has been a major player in the citrus industry for many decades now. We have over 6,000 acres of active citrus land with various varieties of oranges for juice. We have been in a war against HLB for many years and time is running out for many growers. Just five short years ago we were at over 16,000 active citrus acres. The loss of over 10,000 acres is a direct result of citrus greening. The need is great to resurrect a product that will help us fight multiple pests as well as promote tree health and growth and increase fruit yields.

As a grower we used aldicarb in the past under the registered name of Temik. We are aware that aldicarb requires precise application and safety requirements and I can assure you we are prepared to follow the stringent program in our groves. The reinstatement of aldicarb in the citrus industry is crucial to our survival. We recently suffered major setback due to Hurricane Irma and that toppled with the constant pressure of Citrus Greening has many growers in a fight to stay in business. We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops.

John Gose,

A handwritten signature in black ink, appearing to read 'John Gose', written over a horizontal line.

General Manager

# Wm. G. Roe & Sons, Inc.

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SPECIALIZING IN FRESH TANGERINES, FRESH BLUEBERRIES AND CITRUS JUICES

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[www.nobletangerines.com](http://www.nobletangerines.com)

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Frederick W. Roe 1922-1982  
Willard E. Roe 1919-2000

Noble  
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Red Deer  
Peace River Valley  
Blue Lake  
Tru-Tone  
Tru-Type  
Blu-Knight

To: Antoine Puech  
Managing Member AgLogic Chemical LLC  
121 South Estates Drive, Suite 101  
Chapel Hill, NC 27514

From: Bill Roe  
VP Operations Wm. G Roe & Sons Inc.  
Winter Haven, FL 33882

Date: September 28, 2017  
Re: AgLogic 15GG Aldicarb pesticide

Dear Mr Puech:

I am writing this letter in support of the re-registration of Aldicarb as a restricted use pesticide for use on Florida citrus.

Our company Wm G Roe & Sons is a long standing player in the citrus industry in Florida. We own manage or operate approximately 3,000 acres of citrus across various locations throughout the citrus belt. We have a diversified portfolio of varieties which range from Pomelo to Tangerines and our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are the leading shipper of tangerines in the state of Florida and our brand Noble is highly respected in retail and terminal markets. We had used Aldicarb in the form of Temik for many years during the decades of the 80's, 90's, and 2,000's.

At one point during the 90's we were certified commercial applicators in addition to using it on all of our own acreage for which it could be permitted.

As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product.

We recognize that Aldicarb requires a stringent stewardship program to insure its safe and appropriate application. Florida had implemented a rigorous stewardship program through its Dept of Agriculture during the prior application period which required prior site inspections, well set-backs, and application permits specific to site. For many years this program was successfully administered and has a legacy of providing the industry with a proven tool to enhance tree vigor, yield and fruit quality.

As an industry besieged with disease and recent bad weather luck we sorely need this product for use in our groves to offset the deleterious impacts of Greening.

Sincerely,





October 10, 2017

Antoine Puech  
Managing Member  
Aglogic Chemical LLC  
121 S Estates Drive Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

My name is Steve Ryan and I am the President of Citrus Operations for Alico. Our company grows 32,000 acres of citrus throughout Florida. We currently have 250 full time employees as well as several hundred contract laborers.

We have been battling Huanglongbing, aka citrus greening, for several years and have seen our production decline rapidly as a direct result of this disease. One of our primary weapons against the vectors of this disease was Aldicarb which we used until it was taken off the market in 2010. Now is the time to resurrect this product as a much needed tool in our battle to stop the devastating ravages of this disease.

We at Alico understand that this product requires diligent stewardship activities and are committed to ensuring this product is used in a safe and responsible manner. Our company has experience in using millions of pounds of Aldicarb for over 20 years without incident.

The damage caused by Hurricane Irma has only exacerbated our need to have this product available to us as soon as possible. We appreciate the efforts of Aglogic in bringing this product back to the citrus industry. Alico is committed to assisting you however we can in obtaining regulatory approval. It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications.

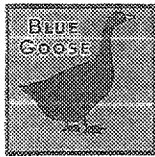
Thank you again for your efforts to get this product reinstated for the citrus industry. It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Ryan", with a large, sweeping flourish extending from the end of the signature.

Steve Ryan  
President

12010 E Hwy 70  
Arcadia, FL 34266



**Blue  
Goose  
Growers**

**Florida Grove and Crop Management L.L.C**

P.O. Box 14709  
Ft Pierce, FL 34979  
Phone (772) 461-3020  
Fax (772) 468-4669

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S. Estates Dr., Suite 101  
Chapel Hill, NC 27514

**RE: Aldicarb (Temik) Re-Registration**

Dear Mr. Puech:

As General Manager of Blue Goose Growers, a 10,000 acre citrus management company, located on the east coast of Florida, I fully support your effort to re-register Temik for use on citrus in Florida.

As you are aware, our industry is suffering and in need of every available tool to control the spread of citrus greening and make this industry viable again. Allowing Temik to be used again on citrus in Florida will once again allow us to have a familiar product, a product that works, to control the pests that carry diseases that threaten our citrus crops.

Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!

We all genuinely appreciate your effort to expedite this re-registration effort, and look forward to having Temik available for use.

Sincerely Yours,

  
Timothy J. Dooley  
VP/GM, BGG

## Antoine Puech

---

**From:** Marvin Kahn <mkahn@kahngrove.com>  
**Sent:** Friday, November 03, 2017 3:52 PM  
**To:** Antoine Puech  
**Cc:** mikes@flicitrusmutual.com; Andrew Meadows; Trevor Murphy  
**Subject:** Aldicarb

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Good afternoon Mr. Puech,

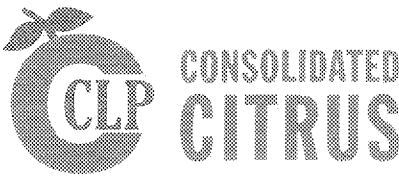
We are a third-generation citrus growing operation, with experience in the industry dating back to the 1930s when my father purchased his first orange grove. We have had experience using Aldicarb in the past and have witnessed firsthand it's positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods. Please let us know if there is anything we can do to assist you in this process.

If you have not heard from the five or so grower organizations CEO's , we or Mike Sparks and Andrew Meadows could help in this regard.

Regards,

Marvin Kahn  
Kahn Citrus Management, LLC  
Murphy Ag Solutions of the Heartland, LLC  
P.O. Box 3346  
Sebring, FL 33871  
863-381-0384 (Cell)  
863-385-6136 (Office)  
863-382-9737 (Fax)





10/20/2017

Michael Stewart, Manager  
Horticultural Services  
Consolidated Citrus LP  
63 Barn Rd.  
Venus, FL 33960

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

In my position as Manager – Horticultural Services for Consolidated Citrus LP, I am writing in support of AgLogic LLC's application to register AgLogic 15GG Aldicarb pesticide for use in citrus in the state of Florida. Consolidated Citrus has nearly 30,000 acres of citrus, making it one of the largest citrus production companies in Florida. I have used Aldicarb, as the branded product Temik, for many years under three different registrants, Union Carbide, Rhone Poulenc and Bayer Crop Science. I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials. If AgLogic 15GG Aldicarb is registered and priced right, Consolidated Citrus would very likely use it for both fresh and processed citrus fruit production. Thank you for your efforts to register this product.

Sincerely yours,

Michael Stewart, Manager  
Horticultural Services

63 Barn Road  
Venus, FL 33960

(p) 863-699-6090  
(f) 863-465-6837



October 13, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

Our company has been growing citrus in central Florida since the 1920's. The fifth generation has just joined us and expanded our farming operation to include blueberries. My two brothers and I manage the day to day farming activities personally meaning our boots are in the groves.

I am writing to support AgLogic Chemical LLC to pursue the registration for AgLogic 15GG Aldicarb for use in Florida citrus. For more than 20 years, Aldicarb (brand name Temik) was one of the most effective inputs to manage a broad range of citrus pests systemically in the tree. This resulted in substantial increases in fruit yields and quality as well as improved growth

The grower community is encouraged by your effort to get an Aldicarb product again registered in Florida citrus. Right now, growers are in the fight of their life against a disease known as HLB, or citrus greening. HLB is a vascular disease vectored by the Asian citrus psyllid (ACP). It is endemic to the state of Florida and it can kill a tree within two years. Our crop has shrunk by more than 66 percent since the onset of HLB.

No cure exists although a massive research effort over the past decade has made headway. Adding Aldicarb back to the toolbox will help slow the spread of the disease through an effective integrated management program. When Temik was registered in Florida citrus, growers followed an intensive stewardship program regulated at both the state and federal level. All application sites were monitored prior to the start of the approved application period. All wells at each site were identified, located, and flagged with a setback. The program clearly showed that Aldicarb can be used safely.

Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid.

Regards,

A handwritten signature in dark ink, appearing to read "John P. Barben".

John P. Barben  
VP, Robert J. Barben, Inc.  
VP, Barben Fruit Co., Inc.



November 3, 2017

Antoine A Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

I am writing this letter to offer my support, and the support of Graves Brothers Company, in the pursuit of re-registration of Aldicarb as a restricted use pesticide on Florida citrus.

Having been raised in Central Florida while working on family owned citrus properties, and as a graduate of The University of Florida Citrus Horticulture Program, I feel that my 30 years of citrus production experience qualifies me to encourage the return of Aldicarb (AgLogic 15GG) pesticide to the Florida Citrus Industry.

I currently manage the agricultural properties owned by Graves Brothers Company. GBC has been involved in Florida agriculture since the 1930's and currently owns and manages 9,000 acres of cattle, timber, vegetable, ornamental and citrus production in Florida. Over the last 70 years Graves Brothers Company has been heavily focused on all phases of the Florida Citrus Industry from nursery tree production through citrus harvesting, packing and sales.

We are struggling, as is the entire Florida Citrus Industry, with the bacterial disease Huanglongbing and its associated vector Asian Citrus Psyllid. The reduction in tree health brought on by this imported disease and its introduced vector has placed our entire industry on the precipice of collapse. Our industry is desperately in need of tools to combat this endemic disease.

Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control.

It is my understanding that Ag Logic 15GG will be labeled for application and use by the same Florida Rule (Rule 5E2.028) as in the past. The history of stewardship of Aldicarb by Florida Citrus Growers under these guidelines has proven that this product can be used safely and without any unacceptable environmental risk. The cadre of growers and applicators that were part of this successful history are more than capable of continuing this legacy in Florida citrus.

Please consider the needs of Graves Brothers Company and more specifically the needs of The Florida Citrus Industry as you endeavor to return this important tool to our diminished grower toolbox.

Sincerely,

David F Howard  
Vice President of Operations  
Graves Brothers Company  
2770 Indian River Boulevard, Suite 201  
Vero Beach, Florida  
Phone: 772.562.3886, Mobile: 772.473 9622

2770 Indian River Blvd; Suite 201, Vero Beach, Florida 32960-4230  
Phone (772) 562-3886 Fax (772) 562-3565  
[www://GravesBrothersCompany.com](http://www.GravesBrothersCompany.com)

ED\_002527\_00001836-00016



# FLORIDA FERTILIZER COMPANY, INC.

P.O. BOX 1087 • WAUCHULA, FL 33873-1087  
(863) 773-4159 • FAX # (863) 773-9363  
office@flfertilizer.com

October 10, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

My name is Keith Davis. I am a citrus grower, fertilizer and agricultural chemical supplier. I own approximately 175 acres of citrus, and make recommendations for many customers in the citrus industry.

I strongly support AgLogic efforts to register AgLogic 15GG for use on citrus in the state of Florida. As a citrus grower and chemical supplier, with almost 40 years of experience, I have seen firsthand what Aldicarb does for a citrus tree. Aldicarb makes it "Healthy"! Why? It reduces nematodes on the roots, and controls piercing and sucking insects. Aldicarb also increases pound solids of fruit, enables it to handle stress from cold weather, and should help trees survive and be able to withstand the effects of citrus greening (HLB) bacteria.

Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements.

AgLogic 15GG would be a great product to have for Florida citrus, to keep this great industry strong and viable.

Sincerely,



Keith Davis

Message

---

**From:** Beck, Nancy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=168ECB5184AC44DE95A913297F353745-BECK, NANCY]  
**Sent:** 8/13/2018 12:51:58 AM  
**To:** Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Erik Baptist (baptist.erik@epa.gov) [baptist.erik@epa.gov]  
**Subject:** FW: Temik/AgLogic  
**Attachments:** Aldicarb SLN 8-6-2018 revised after meeting with AgLogic\_clean.doc

## Deliberative Process / Ex. 5

\*\*\*\*\*

Nancy B. Beck, Ph.D., DABT  
Deputy Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
P: 202-564-1273

**Personal Matters / Ex. 6**  
[beck.nancy@epa.gov](mailto:beck.nancy@epa.gov)

---

**From:** Guilaran, Yu-Ting  
**Sent:** Friday, August 10, 2018 9:26 AM  
**To:** Beck, Nancy <Beck.Nancy@epa.gov>; Keigwin, Richard <Keigwin.Richard@epa.gov>  
**Cc:** Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Keller, Kaitlin <keller.kaitlin@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Pease, Anita <Pease.Anita@epa.gov>  
**Subject:** RE: Temik/AgLogic

Here it is...

Regards,

Yu-Ting Guilaran, P.E.  
Director

Pesticide Re-evaluation Division (PRD)  
Office of Pesticide Programs  
Office of Chemical Safety and Pollution Prevention  
(tel) 703 308 0052  
(fax) 703 308 8005  
Mail code 7508P  
Room number PY S9623

---

**From:** Beck, Nancy  
**Sent:** Friday, August 10, 2018 9:18 AM  
**To:** Keigwin, Richard <Keigwin.Richard@epa.gov>  
**Cc:** Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Keller, Kaitlin <keller.kaitlin@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Guilaran, Yu-Ting <Guilaran.Yu-Ting@epa.gov>; Pease, Anita <Pease.Anita@epa.gov>  
**Subject:** Re: Temik/AgLogic

Attachment did t come through. Thanks.

\*\*\*\*\*

Nancy B. Beck, Ph.D., DABT  
Deputy Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
P: [202-564-1273](tel:202-564-1273)

**Personal Matters / Ex. 6**  
[beck.nancy@epa.gov](mailto:beck.nancy@epa.gov)

On Aug 10, 2018, at 9:12 AM, Keigwin, Richard <[Keigwin.Richard@epa.gov](mailto:Keigwin.Richard@epa.gov)> wrote:

## Deliberative Process / Ex. 5

Rick Keigwin  
Director, Office of Pesticide Programs  
U.S. Environmental Protection Agency  
Phone: 703-305-7090  
Website: [www.epa.gov/pesticides](http://www.epa.gov/pesticides)  
Sent from my iPhone

Begin forwarded message:

**From:** "Keigwin, Richard" <[Keigwin.Richard@epa.gov](mailto:Keigwin.Richard@epa.gov)>  
**To:** "Baptist, Erik" <[baptist.erik@epa.gov](mailto:baptist.erik@epa.gov)>, "Messina, Edward" <[Messina.Edward@epa.gov](mailto:Messina.Edward@epa.gov)>  
**Cc:** "Beck, Nancy" <[Beck.Nancy@epa.gov](mailto:Beck.Nancy@epa.gov)>, "Bertrand, Charlotte" <[Bertrand.Charlotte@epa.gov](mailto:Bertrand.Charlotte@epa.gov)>  
**Subject:** RE: OPP General Agenda Item; Temik

Message

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**From:** Beck, Nancy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=168ECB5184AC44DE95A913297F353745-BECK, NANCY]  
**Sent:** 7/2/2018 6:27:00 PM  
**To:** Guilaran, Yu-Ting [Guilaran.Yu-Ting@epa.gov]; Keller, Kaitlin [keller.kaitlin@epa.gov]  
**Subject:** Fwd: AgLogic Florida SLN [IWOV-PaleyDocs.FID579377]  
**Attachments:** 3588985\_1.pdf; ATT00001.htm; ATT1.pdf; ATT00002.htm; ATT2.pdf; ATT00003.htm

\*\*\*\*\*

Nancy B. Beck, Ph.D., DABT  
Deputy Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
P: 202-564-1273

**Personal Matters / Ex. 6**

beck.nancy@epa.gov

Begin forwarded message:

**From:** "Jim Rathvon" <jrathvon@paleyrothman.com>  
**To:** "Keigwin, Richard" <Keigwin.Richard@epa.gov>, "Beck, Nancy" <Beck.Nancy@epa.gov>  
**Cc:** "Gebken, Richard" <Gebken.Richard@epa.gov>, "Maignan, Tawanda" <Maignan.Tawanda@epa.gov>, "Antoine Puech" <antoinepuech@meycorp.com>, "Cristen S. Rose" <crose@paleyrothman.com>, "47788\_0001 \_ Aglogic Chemical\_ LLC Florida Citrus" <[F579377].PaleyDocs@NDM.paleyrothman.com>  
**Subject:** AgLogic Florida SLN [IWOV-PaleyDocs.FID579377]

Dear Mr. Keigwin and Ms. Beck: Attached is a letter on behalf of AgLogic Chemical LLC concerning an issue of great importance to Florida citrus growers and, indirectly, American consumers. Thank you in advance for your attention to this urgent matter.

Respectfully submitted,

Jim Rathvon  
Cristen Rose  
Counsel for AgLogic Chemical LLC

James P. Rathvon  
Attorney At Law  
Bio | Vcard



4800 Hampden Lane | 6th Floor | Bethesda, MD 20814 | 301-951-9342 | [www.paleyrothman.com](http://www.paleyrothman.com)

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July 2, 2018

**BY ELECTRONIC AND OVERNIGHT MAIL**

Rick Keigwin, Director  
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USEPA Headquarters  
William Jefferson Clinton Building  
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([keigwin.richard@epa.gov](mailto:keigwin.richard@epa.gov))

Nancy Beck, Deputy Assistant Administrator  
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Washington, DC 20460-0001  
([beck.nancy@epa.gov](mailto:beck.nancy@epa.gov))

Re: Critically Important Pesticide SLN to Help Embattled Florida Citrus Industry

Dear Sir and Madame:

This letter requests your – and the Agency’s – support for a FIFRA Section 24(c) Special Local Need registration (SLN) for AgLogic 15GG, a granular insecticide containing 15% aldicarb, to control Asian citrus psyllid, citrus rust mites, spider mites, aphids and nematodes on Florida citrus. The SLN application was filed with the Florida Department of Agriculture and Consumer Services (FLDACS) on June 1, 2018 by AgLogic Chemical, LLC, the sole U.S. registrant of aldicarb.

The key facts are these:

1. The Florida citrus industry is on “the brink of annihilation” (Dr. Phillip Stansly, Professor of Entomology, U. Fl., 10/16/17 Letter). It has been ravaged by the citrus greening disease (HLB), transmitted by the Asian citrus psyllid (ACP), and there has been an **80% loss** in production of citrus statewide.<sup>1</sup>
2. Florida growers are losing the battle against the spread of citrus greening disease. At best, the current toolbox of chemical treatments only modestly retards the advance of the disease, but does nothing to improve production. As stated by one grower: “Absent better tools citrus growers will be out of business soon!” (Tim Dooley, Vice President and General Manager, Blue Goose Growers, LLC, 10/11/17 Letter). The intensive use of foliar treatments to fight psyllids has also resulted in other pest problems, including the development of resistance as well as spikes in mite, weevil, and aphid populations.

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<sup>1</sup>. At the time HLB was first discovered in 2003-2004, Florida orange production totaled 242 million boxes. In April 2018, the USDA National Agricultural Statistics Service estimated that just 45 million boxes of oranges would be harvested in 2017-2018 – a decrease of 197 million boxes, or 81%. USDA/NASS, Citrus April Forecast 2017-2018 Season (April 10, 2018) *available at*: [https://www.nass.usda.gov/Statistics\\_by\\_State/Florida/Publications/Citrus/Citrus\\_Forecast/2017-18/cit0418.pdf](https://www.nass.usda.gov/Statistics_by_State/Florida/Publications/Citrus/Citrus_Forecast/2017-18/cit0418.pdf).

3. ***The Florida citrus industry – including the largest growers in the state – enthusiastically support an SLN registration for AgLogic 15GG.*** Indeed, several prominent growers have taken the unusual step of submitting both signed affidavits (Attachment 1) and letters (Attachment 2) detailing why they so urgently need aldicarb.<sup>2</sup> As they explain, a unique attribute of aldicarb is that it stimulates tree health and root growth and ***markedly increases fruit size and yield***, precisely what growers need now to stay in business. Aldicarb is also effective against many pests, including psyllids, mites and nematodes, among others. As one grower has testified: “Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.” (John Gose, General Manager, Lykes Bros. Inc.; 5/17/18 Affidavit).
4. Florida citrus growers are familiar with aldicarb because they used the product (under the trade name, TEMIK 15G) with great results for several decades (~1978-2010), until Bayer, the sole registrant, *voluntarily* cancelled the registration and withdrew from the market, pursuant to a well-publicized corporate decision to exit all WHO Class 1 products.
5. FLDACS has advised AgLogic that it will not approve the SLN unless it is assured that EPA will not disapprove it. It is our understanding that EPA has not yet had the opportunity to review the SLN, attached affidavits and other materials demonstrating the Special Local Need for aldicarb. However, we also understand that there have been early indications by staff members in EPA’s OPP that OPP is inclined to ***deny*** the SLN.

We submit that OPP’s current disinclination to approve the SLN is unjustified and contrary to the public interest. The following points may clarify why we believe this:

6. At the time Bayer cancelled its aldicarb registrations, EPA was concerned about possible dietary risks to infants and children from consumption of food and drinking water containing aldicarb residues. For this reason, AgLogic’s subsequently-obtained registration for AgLogic 15GG, which is approved for use on cotton, peanuts and certain other crops, did not include use on citrus.
7. Over the past several years, aldicarb has undergone Registration Review. During this process, AgLogic implemented significant changes to the product label that result in aggregate dietary exposures to aldicarb well below the 2010 EPA Level of Concern. EPA has recently issued an Interim Registration Review Decision concluding that aldicarb may continue to be registered.
8. To assist the Agency in its assessment of aldicarb, including for use on citrus under a Florida SLN, AgLogic commissioned Dr. Beth Milesen, Principal Scientific Consultant, TSG Consulting, to conduct an acute dietary exposure and risk assessment for aldicarb.

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<sup>2</sup> For convenience, each attachment also includes a cover sheet highlighting relevant excerpts from the affidavits and letters, respectively.

This risk assessment was submitted to EPA earlier this year. Dr. Mileson's affidavit (included in Attachment 1) affirms that she conducted the risk assessment using models and methods identical to those used by EPA's risk assessors. The risk assessment demonstrates that 20% of the US citrus crop may be treated with aldicarb and dietary exposures (including food and water) for all sub-populations are well below any level of concern.

In short, there is no scientific basis for EPA to disapprove the SLN due to dietary risk.

\* \* \*

In summary, this SLN is critically important to a Florida citrus industry that desperately needs help. We urge you to take the steps necessary to ensure that OPP makes a full and fair assessment of the SLN, including its substantial benefits to American growers and consumers.

Time is of the essence. Application of AgLogic 15GG must occur during the dry season, which runs from mid-November through April at the latest. Even after the SLN is approved, several additional steps must be taken before applications can occur. Most important, AgLogic must identify applicators that have (or are willing to purchase) the necessary application equipment, and these applicators must be trained to ensure compliance with AgLogic's product stewardship program. Applicators must also petition FLDACS for permission to apply the product. Aldicarb has not been used on citrus since 2011, so considerable lead time is required to restart applications.

In furtherance of the process, AgLogic requests the opportunity to meet with the Agency as soon as possible to discuss the SLN and respond to any questions or concerns OPP may have. Depending on schedule, it is likely that one or more citrus growers and FLDACS officials will attend the meeting as well.

Thank you in advance for your attention to this important matter. Please do not hesitate to contact us if you have any questions or would like to discuss these issues further.

Sincerely,



James P. Rathvon  
Cristen S. Rose  
Counsel for AgLogic Chemical, LLC

Attachments

cc (by email and overnight mail):  
Richard Gebken, OPP  
Tawanda Maignan, OPP  
Antoine Puech, President/CEO of AgLogic





# **ATTACHMENT 1**

## **Affidavits from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida**

The attached 10 sworn affidavits were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the letters of support that were submitted by these researchers and citrus growers in late 2017.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC – 5/21/18**  
(Also see letter of support from Dr. Philip Stansly, dated 10/16/17)

*Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”*

*One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.*

*Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.*

**2. Walter T. Jerkins, President, Premier Citrus LLC – 5/23/18.**  
(Also see letter of support from Walter T. Jerkins, dated 10/11/17)

*Aldicarb is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.*

*Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.*

*The yield response from the use of aldicarb is robust, resulting in a sustained yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.*

*The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity - precisely the effects that are so desperately needed now by the citrus industry.*

**3. John Gose, General Manager, Lykes Bros. Inc – 5/17/18**  
(Also see letter of support from John Gose, dated 10/2/17)

*Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.*

*A serious drawback of foliar insecticides is that they can wipe out pollinators and other "beneficials" (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.*

*In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly higher pounds of solids per box, producing a very positive net economic return.*

*The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc – 4/27/18**  
(Also see letter of support from William Roe, dated 9/28/17)

*Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest*

*management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.*

*This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both - suppress psyllids and protect beneficials during bloom time - because of its systemic mode of action.*

*Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.*

**5. Dave Owens, Director of Chemical Sales, Alico Citrus -- 5/29/18**

(Also see letter of support from Steve Ryan, President, Alico Citrus, dated 10/10/17)

*Alicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides*

*The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.*

*Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 5/17/18**  
(Also see letter of support from Tim Dooley, dated 10/11/17)

*Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.*

*In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.*

*In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC -- 5/xx/18**  
(Also see letter of support from Marvin Kahn, dated 11/3/17)

*Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better - and are healthier - than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.*

*Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.*

*Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.*

**8. Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP -- 5/23/18**  
(Also see letter of support from Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP, dated 10/20/17)

*When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.*

*The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.*

**9. John Barden, Vice President, Barben Fruit Company Inc – 5/30/18**

(Also see letter of support from John Barden, dated 10/13/17)

*The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ACP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.*

*A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.*

*We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficial when we used aldicarb.*

**10. Dr. Beth Milesen, Principal Scientific Consultant, TSG Consulting – 5/24/18**

*The modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure. Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.*

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF PHILIP A. STANSKY, Ph.D.**

I, Philip A. Stansky, do solemnly swear as follows:

1. I am Professor of Entomology at the University of Florida (UF), Southwest Florida Research and Education Center, 2686 State Road 29 North, Immokalee, FL 34142. I joined UF in 1986, and moved to the Immokalee location in 1989.

2. I hold a Ph.D. in Entomology from Texas A&M (1985), an M.S. in Zoology from the University of Oklahoma (1978), and a B.S. in Zoology from Wayne State University (1967).

3. I am a research and extension entomologist focused on the integrated management of pests affecting major crops grown in southwest Florida, with emphasis on citrus and vegetables. I am the lead author or co-author of more than 538 scientific publications and 158 extension publications in my field, including 172 peer-reviewed articles. I am also the editor of a book and author of 9 book chapters relating to pest management.

4. I develop and test integrated systems of economic and sustainable pest management and their component tactics. I consult with members of the agricultural community, and provide information, training and diagnostic services in collaboration with county and multi-county agents.

5. A key focus of my work for the last 13 years has been and remains the citrus greening disease or huanglongbing (HLB), transmitted by the Asian citrus psyllid (ACP)



*Diaphorina citri*. My work is multifaceted and has included research on the use of aldicarb to control ACP and other citrus pests and to improve citrus yields.

6. Aldicarb (brand name, Temik) was registered for use on citrus in Florida for nearly 30 years until Bayer voluntarily cancelled all of its aldicarb registrations and exited the business at the end of 2010. Subsequently, AgLogic Chemicals, LLC obtained an EPA registration for an aldicarb product similar to Temik, called, AgLogic 15G, labeled for use on several crops not including citrus. AgLogic 15 G was subsequently approved in 2017 for use in Florida on peanuts and cotton by the Florida Department of Agriculture and Consumer Services.

7. I am aware that, at the request of numerous citrus producers, AgLogic Chemicals LLC applied to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG for use on citrus in Florida.

8. In a letter dated October 16, 2017 (attached), I expressed support for this SLN registration in the strongest possible terms. As stated in my letter: “It may not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida’s iconic citrus industry.” Accordingly, I urged that “no effort be spared in registering aldicarb again for citrus in Florida.”

9. I write this Affidavit to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida today.

10. Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”

11. Aldicarb is applied to the soil where it is absorbed by the tree roots and works systemically. As a result, aldicarb provides continuous pest control over an extended period of time, on the order of 90-120 days. At the same time, aldicarb is known to increase root growth, which promotes greater tree health and can lead to larger and more abundant fruit. Our research

cited below from a large scale replicated experiment in a commercial orange grove confirmed increased yield from trees treated with aldicarb. Stansly, P. A., and R. E. Rouse. 1994.

Pest and yield responses of citrus to aldicarb in a flatwoods grove. Proceedings of the Florida State Horticultural Society 107: 69-72.

12. Aldicarb applied through granular applicators below the soil surface has well established integrated pest management and environmental advantages over pesticides that are repeatedly applied through foliar sprays. AgLogic 15 G aldicarb is directly applied into the soil where it is absorbed by the roots, and works systemically against a broad range of pests. As a result, it does not have the same adverse impact as many foliar insecticide sprays on pollinators and other “beneficials” (*e.g.*, wasps, lady beetles, lace wings, and spiders) – which are key to effective integrated pest management programs. The safeguards and stewardship programs that have been adopted over the years for aldicarb provide additional assurance that aldicarb can be used on citrus safely and effectively without harming human health or the environment.

13. The insecticides currently available to citrus growers are, for the most part, applied by ground or aerial spray which may be repeated every 3-4 weeks. Rain events – which are not infrequent during the growing season in Florida – can rapidly wash away these residues, further reducing efficacy. In contrast, once aldicarb is absorbed by the tree roots it will remain active for several months.

14. One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.

15. Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.

16. Another problem faced by citrus growers today is citrus canker. To control canker, growers typically apply a copper-based fungicides at regular intervals. Unfortunately, copper inhibits beneficial mites that control rust mites. As a result, rust mites are a significant problem in many citrus groves where copper has been applied to combat canker. Again, aldicarb is highly effective in providing residual control of rust mites reducing the need for additional sprays.

17. As I noted in my support letter, Florida's iconic citrus industry is in a life or death struggle with HLB for survival. Growers face a host of pest problems, most importantly ACP/HLB, but also rust mites, canker, nematodes, aphids, and others. Hurricane Irma has only exacerbated the difficulties growers now face. In these dire circumstances, growers need more and better management tools, particularly in the face of growing ACP resistance to the neonicotinoids. Aldicarb – a carbamate with a different mode of action– has a proven track record with the Florida citrus industry by providing broad control of psyllids and other important pests while enhancing root growth and fruit production. For all these reasons, I urge the Department to approve an SLN registration for AgLogic 15GG.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on 21 May 2018.

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Philip A. Stansly, Ph.D.

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF WALTER T. JERKINS, JR.**

I, Walter T. Jerkins, Jr., do solemnly swear as follows:

1. I am the President of Premier Citrus and Premier Citrus Management, 635 66<sup>th</sup> Ave. SW, Vero Beach, FL, 32968.

2. Premier is among the largest citrus producers in Florida, managing over 20,000 acres of citrus groves, located in seven (7) counties in Florida. Premier's fresh fruit package house also is one of the largest in Florida.

3. I have more than 40 years of experience in the citrus industry. After graduating from the University of Florida with a major in agriculture in 1975, I worked for about four (4) years at Southern Fruit Distributors, a Florida grower/processor. In 1980, I joined Blue Goose Growers, one of the state's largest grove management company, where I worked for more than 32 years. In 2013, I joined Premier as its President.

4. I am a founding member of Citrus Research and Development Foundation, Inc. (CRDF) and was its first President, a position I held for nine years (2011-Jan. 2018). The CRDF is headed by a 13-member Board of Directors that includes individuals from industry, academia, and government. The CRDF raises money and issues research grants to help companies develop products to combat citrus greening disease (HLB). Through my involvement in CRDF and knowledge of its research, I am well informed about the pest control products currently available

to the citrus industry and products still in the development pipeline. Aldicar is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.

5. I am not aware of any other single product or combination of products that provides the same yield improvement potential to the industry that aldicarb could provide, as discussed below.

6. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.

7. Premier enthusiastically supports AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 11, 2011 (attached), I affirmed Premier's strong support for this SLN registration.

8. The purpose of this Affidavit is to provide further explanation why aldicarb is urgently needed by citrus growers.

9. I have many decades of experience with the use of aldicarb on citrus. During the three decades that I was with Blue Goose Growers, we regularly used aldicarb (Temik) in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently had very positive experiences with aldicarb, which we regarded as a key tool in our arsenal to control insect pests and promote tree growth and fruit production. Year after year we found that when we used aldicarb, trees were healthier and more productive.

10. Premier also used aldicarb very regularly on virtually all of its citrus acres during the many years it was available. Based on my surveying of our grove managers here, Premier's positive experiences with aldicarb were very similar to those of Blue Goose Growers.

11. I have had discussions about aldicarb with many other growers in the industry over the years, including while I was CRDF President. The nearly universal consensus among citrus

producers is that aldicarb is a uniquely valuable product that offers a combination of benefits not provided by any other product or combination of products.

12. Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.

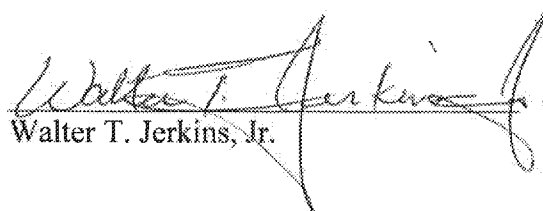
13. The yield response from the use of aldicarb is robust, resulting in a *sustained* yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.

14. The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity – precisely the effects that are so desperately needed now by the citrus industry.

15. For all these reasons, Premier urges the Department in the strongest possible terms to approve AgLogic’s application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.

  
Walter T. Jerkins, Jr.

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF JOHN GOSE**

I, John Gose, do solemnly swear as follows:

1. I am General Manager for Lykes Bros, Inc., 7 Lykes Road, Lake Placid, FL, 33852.
2. Lykes Bros a long-time major player in the Florida citrus industry. We have over 6,000 acres of active citrus groves. Over the last five years we have lost 50% of our citrus acreage due to Citrus Greening.
3. I have more than 40 years of experience in the citrus industry. My family owned citrus groves and I worked in those groves as a teenager. After I graduated from the University of Florida with a degree in agriculture/fruit crops in 1981, I accepted a position at Lykes Bros. I have worked at Lykes Bros in citrus management my entire career.
4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
5. We at Lykes Bros enthusiastically support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 2, 2011 (attached), I affirmed Lykes Bros' strong support for this SLN registration. As stated in my letter: "aldicarb ... is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."

6. The purpose of this Affidavit is to provide further explanation why citrus growers need aldicarb back in their toolbox.

7. Lykes Bros regularly used aldicarb (Temik) in citrus groves we managed for more than two decades, until it was voluntarily withdrawn from the market by Bayer in 2010. We consistently had very positive experiences with aldicarb. Based on our experiences, we consider aldicarb a uniquely valuable product that offers a combination of benefits not provided by any other registered product or combination of products.

8. Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.

9. A serious drawback of foliar insecticides is that they can wipe out pollinators and other “beneficials” (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.

10. In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly *higher pounds of solids per box*, producing a very positive net economic return.

11. The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root



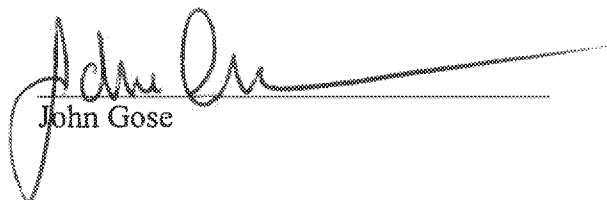
system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.

12. Another serious pest problem associated with citrus production in our groves is root weevils. Citrus greening disease interferes with the transport of sugars and other nutrients from the leaf canopy to the roots through the phloem. To compensate for this, we add nutrients to the soil to help feed the root system. Doing this, however, also supports root weevils (and nematodes). It is not an overstatement to say that root weevils are now a huge problem for Lykes Bros. Aldicarb is needed to combat this problem. When we were able to use aldicarb, we had few problems with root weevils. Root weevil larvae need moisture to come up from the soil and start feeding on the roots. When it was available, we applied aldicarb to soil in November and December. This application timing was perfect for knocking out root weevils before the next fruiting season.

13. For all these reasons, Lykes Bros urges the Department in the strongest possible terms to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 17, 2018.

  
John Gose

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FIFRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
\_\_\_\_\_)

**AFFIDAVIT OF WILLIAM G. ROE II**

I, William (Bill) G. Roe II, do solemnly swear as follows:

1. I am Vice President and Chief Operating Officer for Wm. G. Roe & Sons, Inc. My family has worked in the citrus industry for nearly a century. Wm. G. Roe & Sons, Inc., founded by my grandfather in 1927, is a long-standing player in the Florida citrus industry. We own, manage, or operate approximately 3,000 acres of citrus in various locations across the citrus belt. Our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are perennially one of the top 10 packers in the state. We are also the leading shipper of tangerines in Florida and our brand, Noble, is highly respected in the markets. We have the only private citrus plant breeding program in Florida, which specializes in tangerines.

2. I have more than 40 years of experience in the citrus industry. After graduating from Vanderbilt University in 1975, and taking courses in citriculture at Lake Alfred Citrus Research Station, FL, I began working full-time at Wm G. Roe & Sons in 1976. Prior to that, I worked part-time as a tractor driver and mechanic at the company, starting when I was in high school. I have held several positions at the company, from grove area manager to eventually production manager, a position I held for nearly 20 years. I also worked as our packing house manager for 10 years.

3. I served as President of the Florida Citrus Managers Association from 1986-87, and after appointment to the Florida State PRC, was its Chairman in 1996.

4. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. As stated in my letter dated September 28, 2017 (attached), Wm. G. Roe & Sons strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.

6. Today in Florida we have the benefit of a host of new insecticide chemistries for topical application through spraying. At the same time, Florida has been beset with the citrus greening disease (HLB,) which has manifested itself in a most virulent fashion. Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.

7. This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are

prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both – suppress psyllids and protect beneficials during bloom time – because of its systemic mode of action.

8. While the discussion in the previous paragraph focuses on psyllids, the same point applies to the various members of the scale family, mealybugs, and to some degree leaf miners. Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.

9. A phenomena of the past 12 years since citrus Canker has become endemic in the state has been the necessity of spraying copper every 21 days to control Canker lesions on the peel of many varieties. Canker lesions allow secondary infections to occur in the wounds of the fruit's peel, eventually causing the fruit to drop from the tree, so its control is mandatory for commercial growers. Although we have Streptomycin permitted for topical application and which helps, its application does not allow reduced applications of copper during the growing season. On the down side, application of copper creates a favorable micro-climate for mites to harbor on the peel of the fruit, making them quite difficult to control. When the fruit is quite susceptible during the late spring to Canker, the weather is generally hot and dry, which is perfectly suited for mite build-up even without copper deposits on the surface of the leaves and fruit. Aldicarb provides excellent mite control for an extended period during the spring, is not intrusive to either beneficials or honeybees, and accordingly was one of the reasons why most of the fresh fruit industry used aldicarb when it was available.

10. Another important reason why aldicarb is need by citrus growers today is that it promotes tree health and fruit production – what growers have called a PGR (plant growth regulatory) effect. It is hard to quantitatively assess aldicarb's PGR effect for citrus, but its use causes fruit to have enhanced high peel color and both measurably larger and more uniform size. It could be the combination of aldicarb negating the feeding and sucking of plant bugs and its impact on reducing the nematode population simultaneously, but in any case it is the only chemistry I have used in my 42 years in the industry which enhances the tree's performance and which unquestionably enhances the value of the fruit produced.

11. As growers, we are constantly trying to compensate for the much diminished root system caused by HLB by providing additional fertilizer and nutritional elements. Correspondingly, we are having to apply more foliar copper and leaf nutrients which are exacerbating mite populations. Aldicarb would be a most useful tool for the grower community and the environment by virtue of its providing enhanced control of a broad range of pests while enabling the grower to reduce topical pesticides.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April, 27 2018.

  
William (Bill) G. Roe II

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FIFRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
\_\_\_\_\_)

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FIFRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
\_\_\_\_\_)

**AFFIDAVIT OF DAVID OWENS**

I, David Owens, do solemnly swear as follows:

1. I am the Director of Chemical Sales for Alico Citrus, 12010 Hwy 70, Arcadia, FL, 34266. I have held this position since the end of 2015. My responsibilities at Alico include purchasing from, and liaising with, suppliers of pesticides, fertilizers, and other chemical products for use in citrus.

2. Alico, based in Fort Myers, FL, is among the largest citrus growers in the United States, with some 32,000 acres of citrus groves. In 2017, Alico was the country's largest citrus producer, producing 7.6 million boxes of fruit.

3. Prior to joining Alico, I worked in sales for Rhone Poulenc, and its corporate successors, Aventis and Bayer, for more than 20 years. During this time, I was responsible for the largest sales territory in Florida for the product, Temik, containing aldicarb. My work included talking with growers, interfacing with extension service scientists, and dealing with issues relating to registration, product application, stewardship and other matters. Overall, I have more than 35 years of experience with the citrus industry.

4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. We at Alico strongly support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 10, 2017 from Steve Ryan, President of Citrus Operations (attached), Alico affirmed its support for an SLN registration for aldicarb for citrus. As stated in that letter: "It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications. .... It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated."

6. I and Alico stand by these statements in the October 10, 2017 letter. The purpose of this Affidavit is to explain further why aldicarb is urgently needed by citrus growers, as it fills a need not met by any other product, or combination of products, currently available.

7. Alico has a long, positive history with aldicarb. Alico regularly used aldicarb (Temik) in its citrus groves for at least 20 years, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. Alico's very favorable experiences with aldicarb that spanned decades are the foundation for its strong support for an SLN registration for aldicarb.

8. Aldicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree

growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides.

9. No other product on the market has the same positive effects on tree health and fruit production that Alico – and many other citrus growers – have obtained with the use of aldicarb. During the years Alico used Temik/aldicarb, it realized a very favorable return on its investment in the use of the product year after year.

10. The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.

11. Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.

12. Although there are other products that are labeled for psyllid control, Alico has found that the efficacy of these products for psyllid control has plateaued in recent years. There is great concern at Alico and in the industry that resistance to these chemistries, particularly “neonics” such as imidacloprid, is growing. This is another reason why aldicarb is urgently needed at this time. Aldicarb, a carbamate class pesticide, provides a different mode of action and its use would greatly assist in managing psyllid resistance.

13. Aldicarb also provides well established environmental benefits. Because it is injected into the soil, it poses far less risk of harm to pollinators and other non-target beneficial insects than alternatives that are applied by foliar spray. The ability to use aldicarb would materially reduce the number of foliar applications of pesticides needed to control early season psyllids, and rust mites, greatly reducing the potential adverse impacts of harsher sprays on

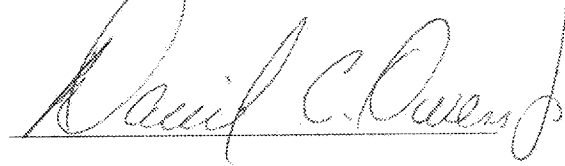


beneficials and the environment. Aldicarb also has a much longer residual effect because it is distributed under the soil, and works best in wet soil. In contrast, foliar applications wash out in Florida's frequent rains and have to be repeated more often. It is fair to say that aldicarb is unique when it comes to controlling pests, while also increasing tree vigor and yields. There are also well established benefits of aldicarb on young trees. Aldicarb gives increased root flushes, and promotes the growth of young non-bearing and bearing trees.

14. For all these reasons, I urge the Department to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 29, 2018.

A handwritten signature in cursive script, appearing to read "David C. Owens", written over a horizontal line.

David Owens

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF TIMOTHY J. DOOLEY**

I, Timothy J. Dooley, do solemnly swear as follows:

1. I am the Vice President and General Manager of Blue Goose Growers, a citrus grove and crop management company based in Ft. Pierce, Florida. I have worked for Blue Goose Growers for approximately 27 years.
2. Blue Goose Growers manages approximately 10,000 acres of citrus trees.
3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
4. As stated in my letter dated October 11, 2017 (attached), Blue Goose Growers strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.
5. Citrus growers in Florida, including groves under Blue Goose Growers' management, have a long history of using aldicarb (Temik) successfully to control pests and threaten Florida's citrus crops.

6. Since aldicarb was removed from the market, the health of the Florida citrus industry has declined immensely. HLB is ravaging the industry, and growers are suffering from declining tree health and decreased fruit size and yield.

7. Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.

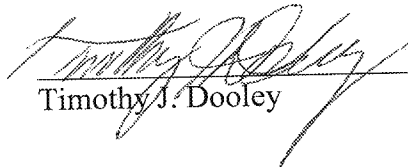
8. In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.

9. In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often.

10. There is no product or combination of products available to citrus growers today that offers the benefits of aldicarb. In addition to the longer residual control it provides, it is critically needed because it controls a wide range of pests, enhances tree health, and increases fruit production.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May, 17, 2018.

  
Timothy J. Dooley

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF )

Application of AgLogic Chemicals, LLC )

For FIFRA § 24(c), Special Local Needs (SLN) )

Registration for )

AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
\_\_\_\_\_)

**AFFIDAVIT OF MARVIN KAHN**

I, Marvin Kahn, do solemnly swear as follows:

1. I am the primary owner of Kahn Citrus Management (KCM), based in Sebring, FL. KCM manages thousands of acres of citrus in Polk, Highlands, Hardee and DeSoto counties, FL.

2. My father entered the citrus industry when he purchased his first orange grove in the 1930s. I have been a part of the citrus industry my entire working life, and have more than 60 years of experience in citrus management. (I just celebrated my 85<sup>th</sup> birthday.)

3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.

4. As stated in my letter dated November 3, 2017 (attached), we at KCM fully support AgLogic's SLN application. Our support for this SLN registration is based on decades of favorable experiences that we have had with aldicarb (Temik), up until the end of 2010, when it was voluntarily withdrawn from the market by Bayer.

5. The purpose of this Affidavit is to explain further why aldicarb is so urgently needed by KCM and other citrus growers in Florida.

6. Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including

nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better – and are healthier – than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.


7. Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.

8. Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.

9. In summary, if aldicarb were available, growers would be able to control psyllids, rust mites, and other pests with fewer foliar sprays involving harsher chemistries. Overall, trees would be healthier and more productive, and there would be less damage to honeybees and other beneficials.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April \_\_, 2018.

  
\_\_\_\_\_  
Marvin Kahn

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF CODY LASTINGER**

I, Cody Lastinger, do solemnly swear as follows:

1. I hold the position of Manager – Horticultural Services for Consolidated Citrus, LP (“Consolidated”), 63 Barn Road, Venus, FL 33960. Consolidated is among the largest citrus producers in the United States, with some 30,000 acres of citrus groves.

2. I graduated from the University of Florida in 2013 with a Master’s in Agronomy and Weed Science. I received a second Master’s in Aquatic Plant Management from the University of Florida Gainesville in 2017. I became Manager – Horticultural Services at Consolidated very recently, after the former long-time Manager, Michael J. Stewart, recently retired.

3. I am aware that AgLogic is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG aldicarb pesticide for use on citrus in Florida.

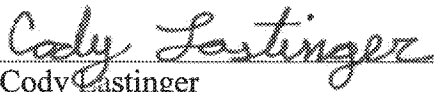
4. In a letter dated October 20, 2017 (attached), former manager Michael Stewart expressed Consolidated’s strong support for this SLN registration. This support is based on Consolidated’s many decades of favorable experiences with aldicarb (brand name, Temik), up through 2010, when it was voluntarily cancelled by Bayer. As stated in our October 20, 2017 letter: “When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective

pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.”

5. The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 23, 2018.

  
Cody Castinger

BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES

)  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FIFRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
)

**AFFIDAVIT OF ROBERT H. BARBEN AND JOHN P. BARBEN**

We, Robert H. Barben and John P. Barben, do solemnly swear as follows:

1. I, Robert H. Barben, am President and I, John P. Barben, am Vice President, of Robert J. Barben, Inc., 21 East Pine Street, Avon Park, FL 33825. Robert J. Barben, Inc. is a family business that traces its origins back to the 1920s. We have been in the business of growing and managing citrus for many decades. We currently manage about 1800 acres of citrus located in four counties in Florida.

2. We are aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

3. We at Robert J. Barben, Inc. strongly support AgLogic's SLN application for the use of aldicarb on citrus. In a letter dated October 13, 2017 (attached), we affirmed our unqualified support for this SLN registration.

4. The purpose of this Affidavit is to provide further explanation as to why aldicarb is urgently needed by Florida citrus growers today.

5. Our company has extensive experience with the use of aldicarb on citrus. During the 2-3 decades that aldicarb (brand name, Temik) was available to us, we used it regularly in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently saw very positive results with aldicarb. We found that when we used aldicarb, trees were healthier and more productive.

6. The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them.

7. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ASP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.

8. A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.

9. We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficials when we used aldicarb. Aldicarb is applied to the soil, not topically, and works systemically, so there is far less direct



exposure to beneficials with aldicarb.

10. The addition of aldicarb, which is a carbamate with a different mode of action, would be very helpful to citrus growers in managing pesticide resistance.

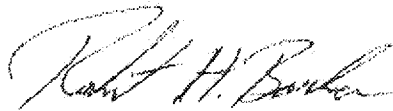
11. If aldicarb were available, we would apply it to the soil in winter months. This would enable us to reduce the number of foliar sprays by at least 2-3 during the spring months, which would reduce adverse impacts on beneficials.

12. Another reason why we urgently need aldicarb back is that it aldicarb increases root growth and fruit production. In our experience, using aldicarb is like giving the tree a steroid; the trees are healthier and there is a very definite growth response. Even more important economically, aldicarb increases the *pounds solids* produced by the tree. No other product compares to aldicarb in stimulating tree growth and fruit production.

13. In summary, aldicarb offers a unique combination of benefits not offered by any other single registered product or combination of registered products. These benefits include broad, long-lasting control of rust mites, minimal impacts on beneficials, and increased tree health and fruit production. These benefits are urgently needed by citrus growers now, more than ever. For these reasons, Robert J. Barben, Inc. urges the Department to approve an SLN registration for AgLogic 15 GG.

We declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.



Robert H. Barben



John P. Barben

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF BETH E. MILESON, PH.D.**

I, Beth E. Milesen, do solemnly swear as follows:

1. I hold the position of Principal Scientific Consultant, Team Leader, Toxicology at Technology Sciences Group, Inc. (TSG), based in TSG's office at 1101 17<sup>th</sup> Street, N.W., Suite 500, Washington, D.C., 20036. I have worked at TSG since 2001,
2. TSG is a part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG).
3. A copy of my Curriculum Vitae is attached. As reflected therein, I received a Ph.D. in Toxicology from the University of North Carolina in Chapel Hill in 1989. I also hold a Bachelor of Science in Biology/Zoology and Master of Science in Biology from George Washington University, as well as a Masters in Business Administration from George Mason University.
4. I am and have been a board-certified toxicologist, otherwise known as a Diplomate of the American Board of Toxicology, continuously since 1996.
5. I have more than 20 years of experience designing, conducting and reviewing toxicological risk assessments.
6. AgLogic asked me to conduct an acute aggregate dietary exposure and risk assessment for aldicarb using the Dietary Exposure Evaluation Model software with the Food

Commodity Intake Database (DEEM-FCID) using methods identical to those used by the U.S. Environmental Protection Agency (US EPA) in its assessment in 2016.<sup>1</sup>

7. The exposure assessment I conducted for AgLogic was intended to estimate potential exposure of the general US population and all sub-populations to aldicarb assuming that 20% of the US citrus crop is treated with aldicarb. For this assessment I used as a starting point the basic data files and assumptions provided by the US EPA in 2016. In addition to the assumed use of aldicarb on 20% of the citrus crop, two assumptions in my aggregate exposure assessment differed from the US EPA: (1) The US EPA assumed that 100% of the imported crops supported by tolerances are treated with aldicarb, while I assumed that no aldicarb residues were in/on imported crops because aldicarb is not registered anywhere outside the US. (2) The aldicarb residue levels in water that I used in the exposure assessment were provided in a report prepared by Waterborne Environmental for AgLogic.<sup>2</sup> The DEEM modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions as described above.

8. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure.<sup>3</sup> Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results

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<sup>1</sup> US EPA, 2016. Memorandum: Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessments for Registration Review Risk Assessment. From: Ideliz Negrón-Encarnación, to: Susan Bartow. PC Code: 098301, DP Barcode: D430197, Office of Pesticide Programs, Office of Chemical Safety and Pollution Prevention, US Environmental Protection Agency, 3/28/2016. 34 pages.

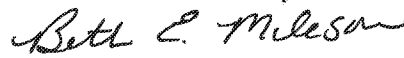
<sup>2</sup> Ritter, A.M. 2017. Aldicarb: Drinking Water Exposure Assessment. Unpublished report by Waterborne Environmental Inc. Study No.: 245.01. November 14, 2017. 22 pages. MRID 50549101.

<sup>3</sup> Milesen, B.E. 2017. Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessment for Proposed Uses. Unpublished report by Technology Sciences Group, Inc. Document No.: 20170230. December 28, 2017. 27 pages. MRID 50549102.

in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 24, 2018.

A handwritten signature in cursive script, appearing to read "Beth E. Miles".

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Beth E. Miles

# Curriculum Vitae Beth E Milesen

## **Beth E. Milesen, Ph.D., DABT**

Technology Sciences Group Inc.

Washington, DC 20036

Phone: (202) 828-8956

email: bmilesen@tsgusa.com

## **EDUCATION**

MBA, George Mason University, Fairfax, VA, (2013)

PhD, Toxicology, University of North Carolina, Chapel Hill, NC (1989)

MS, Biology/Zoology, George Washington University, Washington, DC (1984)

BA, Biology, George Washington University, Washington, DC (1981)

## **PROFESSIONAL EXPERIENCE**

### **Technology Sciences Group Inc. (TSG)**

**2001 to Present**

*Technology Sciences Group Inc. is part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG), and provides state, federal and international expertise on a wide range of scientific and regulatory issues. With experts in regulatory affairs, chemistry, toxicology, environmental fate and risk assessment, TSG provides services in support of the development, registration, compliance and defense of chemically related products. Clients include chemical, pesticide, consumer product, food, personal care and animal health companies, as well as industry groups, trade associations, and law firms.*

### **Principal Scientific Consultant, Team Leader**

#### **Responsibilities include:**

- Create comprehensive toxicology and risk assessment strategies to inform clients' business decisions and achieve their regulatory goals;
- Design and conduct human health and ecological risk assessments to support product stewardship, registrations and certifications;
- Meet with federal and state officials and stakeholder groups to discuss and resolve scientific issues;
- Design toxicology testing programs and testing strategies to support new and existing products;
- Support TSG management and staff in scientific and administrative matters.
- Clients include large producers and marketers of consumer products, chemicals and pesticides, as well as a number of small businesses, biotech firms, and trade associations.

### **ARCADIS**

**2000 to 2001**

*ARCADIS is an international company that provides consultancy, design, engineering and management services in the fields of Infrastructure, Water, Environment and Buildings. With more than 22,000 employees and more than \$3.3B in revenues the company has an extensive international network that is supported by strong local market positions.*

## Curriculum Vitae Beth E Milesen

### Principal Scientist

#### Responsibilities included:

- Develop toxicological and human health risk assessments for site-specific and chemical-specific scenarios,
- Develop and maintain client relationships,
- Mentor junior staff.

### **ILSI Risk Science Institute**

**1996 to 2000**

*The International Life Sciences Institute (ILSI) is a nonprofit, worldwide organization whose mission is to provide science that improves public health and well-being. It achieves this mission by fostering collaboration among experts from academia, government, and industry on conducting, gathering, summarizing, and disseminating science. Its activities focus primarily on nutrition and health promotion; food safety; risk assessment; and the environment.*

### Senior Scientist

#### Responsibilities included:

- Design and implement programs to advance the scientific basis of risk assessment;
- Create proposals outlining goals and objectives, strategic plans and budgets necessary to complete projects;
- Collaborate with scientists from U.S. and international agencies and organizations including the U.S. Environmental Protection Agency, Food and Drug Administration and Organization for Economic Cooperation and Development;
- Direct and chair working groups composed of scientists from academia, industry, government and public interest groups and stimulate them to reach consensus on difficult scientific issues.

#### Projects included:

1. Develop principles to determine what constitutes a common mechanism of toxicity;
2. Develop guidance for the design and interpretation of studies to characterize acetylcholinesterase activity in the peripheral nervous system;
3. Develop a framework for cumulative risk assessment; and
4. Evaluate experimental methods to identify and characterize developmental neurotoxicity.

### **NC Department of Environment & Natural Resources**

**1992 to 1996**

*The North Carolina Department of Environment and Natural Resources (DENR) Division of Air Quality (DAQ) works to protect and improve outdoor, or ambient, air quality in North Carolina for the health, benefit and economic well-being of all. To carry out this mission, the DAQ operates a statewide air quality monitoring network to measure the level of pollutants in the outdoor air, develops and implements plans to meet future air quality initiatives, assures compliance with air quality rules, and educates, informs and assists the public with regard to air quality issues.*

### Toxicologist

#### Responsibilities included:

- Design, conduct, and interpret large-scale ambient sampling studies used to characterize concentrations of toxic air pollutants and assess citizen exposure and risk,
- Direct the DENR Secretary's Scientific Advisory Board on Toxic Air Pollutants (SAB),
  - Work with scientists from research institutions, universities, government and industry;
  - Identify toxic air pollutants (TAPs) of concern to North Carolina;

## Curriculum Vitae Beth E Milesen

- Conduct risk assessments for TAPs based on primary literature.

### **Projects included:**

1. Design and direct large-scale ambient monitoring studies to measure TAPs emitted by petroleum terminals, wood furniture manufacturing facilities and polyurethane foam producing facilities;
2. Assess potential human exposure to emissions from hazardous waste-burning incinerators, phosphate mining operations, petroleum terminals and furniture manufacturing facilities based on measured ambient levels and modeled concentrations of TAPs;
3. Prepare risk assessments and derive acceptable ambient levels (AALs) for many toxicants, including, allyl chloride, toluene diisocyanate, methylene chloride and formaldehyde.

### **Duke University Medical Center**

**1989 to 1991**

*Duke University has about 13,000 undergraduate and graduate students and a world-class faculty helping to expand the frontiers of knowledge.*

### **Research Associate, Department of Pharmacology and the Center for the Study of Aging**

#### **Responsibilities included:**

- Design and conduct behavioral, neurochemical and neuropharmacologic studies to determine toxicologic mechanisms involved in selective neuronal degeneration that occurs following transient forebrain ischemia, an animal model of stroke;
- Supervise undergraduate and graduate students and technical staff.

#### **Projects included:**

1. Complete three comprehensive studies on neuronal degeneration,
2. Publish the results in the peer-reviewed literature;
3. Fulfill postdoctoral training in sociology, physiology, cardiology, and disease in aging populations.

### **University of North Carolina- Chapel Hill**

**1985 to 1989**

*The University of North Carolina at Chapel Hill prides itself as the nation's first public university, serving North Carolina, the United States and the world through teaching, research and public service.*

### **Doctoral candidate, Curriculum in Toxicology in the Medical School of UNC – Chapel Hill**

#### **Responsibilities included:**

- Conduct research in Dr. Richard Mailman's Neurotoxicology Laboratory on the effects of toxicants on brain dopamine neurotransmission in rats;
- Train and supervise laboratory technicians.

# Curriculum Vitae Beth E Mileson

## **George Washington University**

**1980 to 1984**

*The George Washington University is located in the nation's capital and is an institution with a history of dedication to educating and preparing future leaders.*

### **Master's degree candidate, Department of Biological Sciences**

- Conduct research in Dr. Randall Packer's laboratory to determine how acid-base balance in tropical land crabs is affected by changing environmental temperature;
- Teach human and advanced human physiology to undergraduate students.

### **Undergraduate Student Researcher, Department of Biological Sciences**

- Conduct undergraduate research in the laboratory of Dr. John Burns, to determine the seasonal variation in the reproductive biology of tropical poeciliid fish in the absence of significant seasonal changes in day-length.

## **CERTIFICATIONS**

Diplomate of the American Board of Toxicology, 1996; recertified: 2001, 2006, 2011, 2016

## **PROFESSIONAL MEMBERSHIPS**

Society for Risk Analysis  
Society for Neuroscience  
Society of Toxicology  
American Association for the Advancement of Science

## **INVITED PARTICIPANT IN WORKING GROUPS/TASK FORCES**

- **Workshop:** Risk Assessment Methodologies Workshop on Approaches to Weight of the Evidence Evaluation in Risk Assessment, ILSI Health and Environmental Sciences Institute, December 2006.
- **Working Group:** Food Safety in Europe: Risk Assessment of Contaminants in Food, **European Union Concerted Action and ILSI Europe**, January-October 2000
- **Workshop:** Threshold of Toxicological Concern, **ILSI Europe**, October 1999
- **Workshop:** The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- **Working meeting** for development of Total Risk Integrated Model, **U.S. EPA**, June 1996
- **Workshop:** Mechanism-based Toxicology in Cancer Risk Assessment: Implications for Research, Regulation and Legislation, **National Toxicology Program**, January 1995
- **Working Group:** Board of Scientific Counselors Ad Hoc Working Group to review the Criteria for Listing Carcinogens, **National Toxicology Program**, April 1995
- Task Force on Risk-Based Protocol for Determination of Soil and Water Clean-up Levels, **NC Department of Environment and Natural Resources**, 1995-1996



## Curriculum Vitae Beth E Milesen

- Ad Hoc Committee for Air Quality Standards **ACGIH**, 1995
- Air Toxics Committee member, **State and Territorial Air Pollution Program Administrators (STAPPA) and Association of Local Air Pollution Control Officials (ALAPCO)**, 1994-1996

### INVITED PRESENTATIONS

- *Cumulative Risk Assessment of OP Pesticides in the Diet based on a Probabilistic Method for Exposure Assessment.* at the Asia-Wide Symposium on Risk Assessment of Contaminants in Food, Seoul, South Korea, **Korea Food and Drug Administration**, November 1999
- *A Framework for Cumulative Risk Assessment* at the workshop: The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- *A Comparison of Three Methods to Cumulate Risk Due to Exposure to Multiple Chemicals that Act by a Common Mechanism of Toxicity.* **American Crop Protection Association**, December 1998
- *Common Mechanism of Toxicity, Report of the ILSI RSI Working Group.* **EPA FIFRA Scientific Advisory Panel**, 1998
- *Common Mechanism of Toxicity: A Case Study of OP Pesticides* **EPA OPP Pesticide Program Dialogue Committee**, 1998
- *Procedures and Functions of the Secretary's Scientific Advisory Board on Toxic Air Pollutants.* **NC Legislative Committee on Air Quality** 1996
- *Monthly Briefing* Air Quality Committee of the **North Carolina Environmental Management Commission**, 1995-1996
- *Investigation of Bulk Gasoline Terminals at Paw Creek, Mecklenberg County, NC.* **NC Legislative Environmental Review Committee**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation*, **Press Conference**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation*, **Public Meeting**, February 1994
- *Reconciliation of the NC Regulations for Control of Toxic Air Pollutants with the Federal Clean Air Act of 1990.* **NC Aggregates Association**, May 1993 and **Guilford County LEPC Industry Forum Meeting**, May 1993

### ADDITIONAL PROFESSIONAL ACTIVITIES

- Partner with ILSI Europe on **A European Commission Concerted Action** on Risk Assessment of Chemicals in Food and Diet, April, 2000-February 2001
- Organized and chaired a symposium on Cumulative Risk Assessment at the **Society for Risk Analysis Annual Meeting**, December 1999
- Nominated as a potential member of the **EPA FIFRA Scientific Advisory Panel** (declined due to participation in ILSI activities germane to issues considered by the SAP) October, 1997
- Member of the Editorial Advisory Board, **Reviews in Toxicology**, **IOS Press** (2001).

## FULL LENGTH REFEREED PUBLICATIONS

1. Milesen, B.E., Packer, R.K., 1986. Hemolymph acid base balance in the terrestrial crab, *Gecarcinus ruricola*, with changing environmental temperature. **Comp. Biochem. Physiol.** 85A:4;715719.
2. Milesen, B.E., Schwartz, R.D., 1991. The use of locomotor activity as a behavioral screen for neuronal damage following transient forebrain ischemia in gerbils. **Neuroscience Letters** 128; 71-76.
3. Milesen, B.E., Lewis, M.H., Mailman, R.B., 1991. Dopamine receptor "supersensitivity" occurring without receptor up-regulation. **Brain Research**, 561; 1-10.
4. Schwartz, R.D., Yu, X., Wagner, J., Ehrmann, M., Milesen, B.E., 1992. Cellular regulation of the benzodiazepine/GABA receptor: arachidonic acid, calcium, and cerebral ischemia. **Neuropsychopharmacology**, 6; 119-125.
5. Milesen, B.E., Ehrmann, M.L., Schwartz, R.D., 1992. Alterations in the GABA-gated chloride channel following transient forebrain ischemia in the gerbil. **Journal of Neurochemistry**, 58; 600-607.
6. Lawler, C.P., Gilmore, J.H., Mooney, D.H., Mayleben, M.A., Atashi, J.R., Milesen, B.E., Wyrick, S.D., Mailman, R.B., 1993. A rapid and efficient method for the radiosynthesis and purification of [125I]SCH23982. **Journal of Neuroscience Methods**, 49; 141-153.
7. Milesen, B.E., Chambers, J.E., Chen, W.L., Dettbarn, W., Ehrich, M., Eldefrawi, A.T., Gaylor, D.W., Hamernik, K., Hodgson, E., Karczmar, A.G., Padilla, S., Pope, C.N., Richardson, R.J., Saunders, D.R., Sheets, L.P., Sultatos, L.G., Wallace, K.B., 1998. Common mechanism of toxicity: A case study of organophosphorus pesticides. **Toxicological Sciences**, 41; 8-20.
8. Milesen, B.E., Chambers, J.E., Ehrich, M., Hamernik, K., Hodgson, E., Reith, J.P., Saunders, D.R., Sheets, L.P., Sultatos, L.G., Van pelt, C., Wallace, K.B., 1999/2000 Common mechanism of toxicity: evaluation of carbamate pesticides. **Reviews in Toxicology**, 3; 127-138.
9. Milesen, B.E., Ferenc, S.A., 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment: overview. **Environmental Health Perspectives**, 109 (suppl 1); 77-78.
10. Cory-Slechta, D.A., Crofton, K.M., Foran, J.A., Sheets, L.P., Ross, J.F., Weiss, B., **Milesen, B.E.** 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment. II: behavioral considerations. **Environmental Health Perspectives**, 109 (suppl 1); 79-91
11. Dorman, D.C., Allen, S.L., Byczkowski, J.Z., Claudio, L., Fisher, J.E., Fisher, J.W., Harry, G.J., Li, A.A., Makris, S.L., Padilla, S., Sultatos, L.G., **Milesen, B.E.** 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment. III: Pharmacokinetic and pharmacodynamic considerations. **Environmental Health Perspectives**, 109 (suppl 1);101-111.
12. Edler L, Poirier K, Dourson M, Kleiner J, **Milesen B**, Nordmann H, Renwick A, Slob W, Walton K, Wurtzen G. 2002. Mathematical modeling and quantitative methods. **Food Chem Toxicol.** 40(2-3):283-326.

## Curriculum Vitae Beth E Milesen

13. Gargas M.L., Kinzell J.H., Milesen B.E. 2009. Foreword to a special issue of Inhalation Toxicology on a risk assessment for iodomethane. **Inhal Toxicol.** 21(05-07); 447.
14. Milesen B.E., Sweeney L.M., Gargas M.L., Kinzell J.H. 2009. Iodomethane Human Health Risk Characterization. **Inhal Toxicol.** 21(05-07); 583-605.

### BOOK CHAPTERS AND NONREFEREED PUBLICATIONS

1. Mailman, R.B., Milesen, B.E., Lewis, M.H., 1987. Neurotoxicity expressed through alterations of cell cell interaction. in: **Biochemical mechanisms and regulation of intracellular communication.** Princeton Scientific Publishing, Princeton, N.J. pp 97112.
2. Milesen, B.E., Hedrick, M., 1996. Evaluation of emissions from a bulk petroleum terminal cluster in Mecklenberg County, NC. **Air & Waste Management Meeting Proceedings, 1995 meeting.**
3. Milesen, B.E., 1996. Investigation of toxic air pollutants emitted by wood furniture manufacturing facilities in Caldwell County, North Carolina. **NC DEHNR Air Quality Investigation Report**
4. Milesen, B.E., 2001. Guest Perspective: EPA Pesticide Cumulative Risk Model Evolution Continues. **Risk Policy Report.** Volume 8 (10) 30-32.

### ABSTRACTS

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## Curriculum Vitae Beth E Milesen

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# **ATTACHMENT 2**

## Letters from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida

The attached 11 letters were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the sworn affidavits that were submitted by these researchers and citrus growers.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC -- 10/16/17**

(Also see the sworn affidavit from Dr. Philip Stansly, dated 5/21/18)

*"There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane."*

**2. Walter T. Jerkins, President, Premier Citrus LLC -- 10/11/17**

(Also see the sworn affidavit from Walter T. Jerkins, dated 5/23/18)

*"Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus."*

**3. John Gose, General Manager, Lykes Bros. Inc -- 10/2/17**

(Also see the sworn affidavit from John Gose, dated 5/17/18)

*"We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc -- 9/28/17**

(Also see the sworn affidavit from William Roe, dated 4/27/18)

*"As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant*

*and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product."*

**5. Steve Ryan, President, Alico Citrus -- 10/10/17**

(Also see the sworn affidavit from Dave Owens, Director of Chemical Sales, Alico Citrus, dated 5/29/18)

*"As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product."*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 10/11/17**

(Also see the sworn affidavit from Tim Dooley, dated 5/17/18)

*"Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!"*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC – 11/3/17**

(Also see the sworn affidavit from Marvin Kahn, dated 5/xx/18)

*"We have had experience using Aldicarb in the past and have witnessed firsthand its positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods."*

**8. Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP – 10/20/17**

(Also see the sworn affidavit from Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP, dated 5/23/18)

*"I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers*



*who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials."*

**9. John Barden, Vice President, Barben Fruit Company Inc – 10/13/17**

(Also see the sworn affidavit from John Barden, dated 5/30/18)

*"Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid."*

**10. David Howard, Vice President Operations, Graves Brothers Company – 11/3/17**

*"Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control."*

**11. Keith Davis, Owner, Florida Fertilizer Company Inc -- 10/10/17**

*"Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements."*

Southwest Florida Research and Education Center  
2686 State Road 29 North  
Immokalee, FL 34142-9515

239-658-3400  
239-658-3469 Fax  
<http://swfrec.ifas.ufl.edu>

To: Antoine A. Puech, Managing Member, AgLogic Chemical LLC  
From: Dr. Philip A. Stansly, [pstansly@ufl.edu](mailto:pstansly@ufl.edu)  
Cc: Ron Hamel, Gulf Citrus Growers Association  
Date: 16 October 2017  
Subject: Re-registration of aldicarb

Dear Sir,

By means of this memo I would like to express my full support for the re-registration of Aldicarb in citrus. I am a research and extension entomologist working on citrus at this Center since 1989. My appointment is state wide with emphasis of the southwest growing regions which comprises about 25% of total citrus production in the state. During this time I have had considerable experience working with aldicarb, both pre and post greening (HLB) as you can see from the citations below. In my estimation aldicarb is an excellent product both in terms of efficacy as well as environmental and personal safety, thanks to the safeguards and stewardship actually in place.

There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane. Therefore, I urge that no effort be spared in registering aldicarb again for citrus in Florida and elsewhere in the US wherever citrus is grown. Please feel free to contact me for any additional information with respect to this issue.

Best Regards,

Digitally signed by Phil Stansly  
DN: cn=Phil Stansly, o=UF-IFAS, ou=SWFREC,  
email=pstansly@ufl.edu, c=US  
Date: 2017.10.16 11:58:17 -04'00'

Philip A. Stansly  
Professor of Entomology

**References cited:**

Stansly, P. A., and R. E. Rouse. 1994. Pest and yield responses of citrus to Aldicarb in a flatwoods grove. *Proceedings of the Florida State Horticultural Society* 107: 69-72.

Stansly, P. A., and R. E. Rouse. 1994. Pest and yield responses to Temik in southwest Florida's flatwoods - Year 2. *Citrus and Vegetable Magazine* 57: 6-7.

Croxtan, S. D., T. L. Stansly and P. A. Stansly. 2012. Timing of temik and movento applications for control of Asian citrus psyllid (ACP) *Diaphorina citri*, 2010. *Arthropod Management Tests*, 37: D1

Qureshi, J. A., and P. A. Stansly. 2008. Rate, placement and timing of aldicarb applications to control Asian citrus psyllid, *Diaphorina citri* Kuwayama (Hemiptera: Psyllidae), in oranges. *Pest Management Science* 64: 1159-1169.



P.O. BOX 690759  
Vero Beach, FL 32969

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 So Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech;

I am writing this letter with the intent to offer my full support as well as the full support of all of Premier's citrus related companies and clients in Florida for the re-registration of Aldicarb as a restricted use pesticide in Florida.

I currently serve as President of Premier Citrus and Premier Citrus Management, and together these companies have directly managed over 20,000 acres of citrus annually, in seven different Florida counties since 2005. Premier also operates one of the industry's largest fresh fruit packing houses, as well as one of the largest fresh citrus marketing companies. Prior to working with Premier, I managed the state's largest grove management company, Blue Goose Growers all the way back to 1980, including the Dole Citrus activities between 1983 and 2000.

My experience in crop management goes all the way back to 1975, but closer to 1980 when I first became actively involved and responsible for the selection and use of citrus pesticides. Since Aldicarb first became available in Florida, we used the product on practically all of our managed acres at the labeled rate due to the easiest of all metrics to track: higher earnings.

Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus.

Improved yields were most often a result of improved size, which always carries a premium in the fresh fruit business. That size improvement as well as overall blemish control was easily noticed in the packinghouse and drove more favorable size and quality packages, again driving up revenues for fresh fruit as well as juice fruit.

In fact, the product was so important to our annual production plan that actively participating in complying with the Stewardship program was a high company priority to insure

that by our safe use we could help the registrant keep the product available out into the future. It was a major disappointment when Bayer voluntarily pulled the label in 2010, and we believe strongly that its discontinued use and loss of the PGR and other effects coincided and contributed to both our company and the Florida industry yield decline as the additional pressure of ACP and HLB expanded and has contributed to this day.

Premier's current nucleus of excellent grove managers happen to be the remnants of one of the industry's largest Aldicarb applicators prior to 2010, and we have access to those same machines now. Together with those machines and experienced managers and applicators, Premier could be in the application business as quickly as anyone, as we have the weight of the grove financial base also pushing for this application capability.

The availability of Aldicarb will be a valuable offset to the nagging weak tree health that continues to suffocate our yields. HLB has the Florida industry on its heels, and with the last hurricane, it's fair to say we're desperate to obtain any tools that can even incrementally get us back to improved productivity and revenues to keep us in business.

Please keep up your best effort to obtain a registration by whatever means necessary, and consider Premier a strong supporter willing to help you at every turn.

Thank you for considering our need and our support of your pursuit of the use of Aldicarb for Florida citrus growers.

A handwritten signature in black ink, appearing to read "Walter T. Jerkins, Jr.", with a stylized, flowing script.

Walter T. Jerkins, Jr.  
President, Premier Citrus, LLC  
625 66th Ave SW, 32968  
Vero Beach, Florida  
Ph: 772-469-1549, Mobile: 772-473-9754

# LYKES BROS. INC.

7 Lykes Road  
Lake Placid, FL 33852-9582



Telephone: (863) 465-4127  
FAX: (863) 465-2289

To: Antoine Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

October 2, 2017

Dear Mr. Puech,

My name is John Gose and I am the General Manager for Lykes Bros. Inc. Our company has been a major player in the citrus industry for many decades now. We have over 6,000 acres of active citrus land with various varieties of oranges for juice. We have been in a war against HLB for many years and time is running out for many growers. Just five short years ago we were at over 16,000 active citrus acres. The loss of over 10,000 acres is a direct result of citrus greening. The need is great to resurrect a product that will help us fight multiple pests as well as promote tree health and growth and increase fruit yields.

As a grower we used aldicarb in the past under the registered name of Temik. We are aware that aldicarb requires precise application and safety requirements and I can assure you we are prepared to follow the stringent program in our groves. The reinstatement of aldicarb in the citrus industry is crucial to our survival. We recently suffered major setback due to Hurricane Irma and that toppled with the constant pressure of Citrus Greening has many growers in a fight to stay in business. We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops.

John Gose,

A handwritten signature in black ink, appearing to read 'John Gose'.

General Manager

# Wm. G. Roe & Sons, Inc.

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Blue Lake  
Tru-Tone  
Tru-Type  
Blu-Knight

To: Antoine Puech  
Managing Member AgLogic Chemical LLC  
121 South Estates Drive, Suite 101  
Chapel Hill, NC 27514

From: Bill Roe  
VP Operations Wm. G Roe & Sons Inc.  
Winter Haven, FL 33882

Date: September 28, 2017  
Re: AgLogic 15GG Aldicarb pesticide

Dear Mr Puech:

I am writing this letter in support of the re-registration of Aldicarb as a restricted use pesticide for use on Florida citrus.

Our company Wm G Roe & Sons is a long standing player in the citrus industry in Florida. We own manage or operate approximately 3,000 acres of citrus across various locations throughout the citrus belt. We have a diversified portfolio of varieties which range from Pomelo to Tangerines and our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are the leading shipper of tangerines in the state of Florida and our brand Noble is highly respected in retail and terminal markets. We had used Aldicarb in the form of Temik for many years during the decades of the 80's, 90's, and 2,000's.

At one point during the 90's we were certified commercial applicators in addition to using it on all of our own acreage for which it could be permitted.

As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product.

We recognize that Aldicarb requires a stringent stewardship program to insure its safe and appropriate application. Florida had implemented a rigorous stewardship program through its Dept of Agriculture during the prior application period which required prior site inspections, well set-backs, and application permits specific to site. For many years this program was successfully administered and has a legacy of providing the industry with a proven tool to enhance tree vigor, yield and fruit quality.

As an industry besieged with disease and recent bad weather luck we sorely need this product for use in our groves to offset the deleterious impacts of Greening.

Sincerely,





October 10, 2017

Antoine Puech  
Managing Member  
Aglogic Chemical LLC  
121 S Estates Drive Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

My name is Steve Ryan and I am the President of Citrus Operations for Alico. Our company grows 32,000 acres of citrus throughout Florida. We currently have 250 full time employees as well as several hundred contract laborers.

We have been battling Huanglongbing, aka citrus greening, for several years and have seen our production decline rapidly as a direct result of this disease. One of our primary weapons against the vectors of this disease was Aldicarb which we used until it was taken off the market in 2010. Now is the time to resurrect this product as a much needed tool in our battle to stop the devastating ravages of this disease.

We at Alico understand that this product requires diligent stewardship activities and are committed to ensuring this product is used in a safe and responsible manner. Our company has experience in using millions of pounds of Aldicarb for over 20 years without incident.

The damage caused by Hurricane Irma has only exacerbated our need to have this product available to us as soon as possible. We appreciate the efforts of Aglogic in bringing this product back to the citrus industry. Alico is committed to assisting you however we can in obtaining regulatory approval. It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications.

Thank you again for your efforts to get this product reinstated for the citrus industry. It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated.

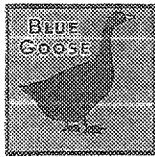
Sincerely,

A handwritten signature in black ink, appearing to read "Steve Ryan", is written over a circular stamp.

Steve Ryan  
President

12010 E Hwy 70  
Arcadia, FL 34266





**Blue  
Goose  
Growers**

**Florida Grove and Crop Management L.L.C**

P.O. Box 14709  
Ft Pierce, FL 34979  
Phone (772) 461-3020  
Fax (772) 468-4669

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S. Estates Dr., Suite 101  
Chapel Hill, NC 27514

**RE: Aldicarb (Temik) Re-Registration**

Dear Mr. Puech:

As General Manager of Blue Goose Growers, a 10,000 acre citrus management company, located on the east coast of Florida, I fully support your effort to re-register Temik for use on citrus in Florida.

As you are aware, our industry is suffering and in need of every available tool to control the spread of citrus greening and make this industry viable again. Allowing Temik to be used again on citrus in Florida will once again allow us to have a familiar product, a product that works, to control the pests that carry diseases that threaten our citrus crops.

Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!

We all genuinely appreciate your effort to expedite this re-registration effort, and look forward to having Temik available for use.

Sincerely Yours,

  
Timothy J. Dooley  
VP/GM, BGG

## Antoine Puech

---

**From:** Marvin Kahn <mkahn@kahngrove.com>  
**Sent:** Friday, November 03, 2017 3:52 PM  
**To:** Antoine Puech  
**Cc:** mikes@flicitrusmutual.com; Andrew Meadows; Trevor Murphy  
**Subject:** Aldicarb

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Good afternoon Mr. Puech,

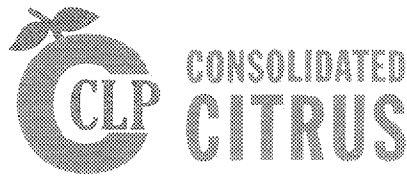
We are a third-generation citrus growing operation, with experience in the industry dating back to the 1930s when my father purchased his first orange grove. We have had experience using Aldicarb in the past and have witnessed firsthand it's positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods. Please let us know if there is anything we can do to assist you in this process.

If you have not heard from the five or so grower organizations CEO's , we or Mike Sparks and Andrew Meadows could help in this regard.

Regards,

Marvin Kahn  
Kahn Citrus Management, LLC  
Murphy Ag Solutions of the Heartland, LLC  
P.O. Box 3346  
Sebring, FL 33871  
863-381-0384 (Cell)  
863-385-6136 (Office)  
863-382-9737 (Fax)





10/20/2017

Michael Stewart, Manager  
Horticultural Services  
Consolidated Citrus LP  
63 Barn Rd.  
Venus, FL 33960

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

In my position as Manager – Horticultural Services for Consolidated Citrus LP, I am writing in support of AgLogic LLC's application to register AgLogic 15GG Aldicarb pesticide for use in citrus in the state of Florida. Consolidated Citrus has nearly 30,000 acres of citrus, making it one of the largest citrus production companies in Florida. I have used Aldicarb, as the branded product Temik, for many years under three different registrants, Union Carbide, Rhone Poulenc and Bayer Crop Science. I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials. If AgLogic 15GG Aldicarb is registered and priced right, Consolidated Citrus would very likely use it for both fresh and processed citrus fruit production. Thank you for your efforts to register this product.

Sincerely yours,

Michael Stewart, Manager  
Horticultural Services

63 Barn Road  
Venus, FL 33960

(p) 863-699-6090  
(f) 863-465-6837



October 13, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

Our company has been growing citrus in central Florida since the 1920's. The fifth generation has just joined us and expanded our farming operation to include blueberries. My two brothers and I manage the day to day farming activities personally meaning our boots are in the groves.

I am writing to support AgLogic Chemical LLC to pursue the registration for AgLogic 15GG Aldicarb for use in Florida citrus. For more than 20 years, Aldicarb (brand name Temik) was one of the most effective inputs to manage a broad range of citrus pests systemically in the tree. This resulted in substantial increases in fruit yields and quality as well as improved growth

The grower community is encouraged by your effort to get an Aldicarb product again registered in Florida citrus. Right now, growers are in the fight of their life against a disease known as HLB, or citrus greening. HLB is a vascular disease vectored by the Asian citrus psyllid (ACP). It is endemic to the state of Florida and it can kill a tree within two years. Our crop has shrunk by more than 66 percent since the onset of HLB.

No cure exists although a massive research effort over the past decade has made headway. Adding Aldicarb back to the toolbox will help slow the spread of the disease through an effective integrated management program. When Temik was registered in Florida citrus, growers followed an intensive stewardship program regulated at both the state and federal level. All application sites were monitored prior to the start of the approved application period. All wells at each site were identified, located, and flagged with a setback. The program clearly showed that Aldicarb can be used safely.

Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid.

Regards,

A handwritten signature in dark ink, appearing to read "John P. Barben".

John P. Barben  
VP, Robert J. Barben, Inc.  
VP, Barben Fruit Co., Inc.



November 3, 2017

Antoine A Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

I am writing this letter to offer my support, and the support of Graves Brothers Company, in the pursuit of re-registration of Aldicarb as a restricted use pesticide on Florida citrus.

Having been raised in Central Florida while working on family owned citrus properties, and as a graduate of The University of Florida Citrus Horticulture Program, I feel that my 30 years of citrus production experience qualifies me to encourage the return of Aldicarb (AgLogic 15GG) pesticide to the Florida Citrus Industry.

I currently manage the agricultural properties owned by Graves Brothers Company. GBC has been involved in Florida agriculture since the 1930's and currently owns and manages 9,000 acres of cattle, timber, vegetable, ornamental and citrus production in Florida. Over the last 70 years Graves Brothers Company has been heavily focused on all phases of the Florida Citrus Industry from nursery tree production through citrus harvesting, packing and sales.

We are struggling, as is the entire Florida Citrus Industry, with the bacterial disease Huanglongbing and its associated vector Asian Citrus Psyllid. The reduction in tree health brought on by this imported disease and its introduced vector has placed our entire industry on the precipice of collapse. Our industry is desperately in need of tools to combat this endemic disease.

Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control.

It is my understanding that Ag Logic 15GG will be labeled for application and use by the same Florida Rule (Rule 5E2.028) as in the past. The history of stewardship of Aldicarb by Florida Citrus Growers under these guidelines has proven that this product can be used safely and without any unacceptable environmental risk. The cadre of growers and applicators that were part of this successful history are more than capable of continuing this legacy in Florida citrus.

Please consider the needs of Graves Brothers Company and more specifically the needs of The Florida Citrus Industry as you endeavor to return this important tool to our diminished grower toolbox.

Sincerely,

David F Howard  
Vice President of Operations  
Graves Brothers Company  
2770 Indian River Boulevard, Suite 201  
Vero Beach, Florida  
Phone: 772.562.3886, Mobile: 772.473 9622

2770 Indian River Blvd; Suite 201, Vero Beach, Florida 32960-4230  
Phone (772) 562-3886 Fax (772) 562-3565  
[www://GravesBrothersCompany.com](http://www.GravesBrothersCompany.com)

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# FLORIDA FERTILIZER COMPANY, INC.

P.O. BOX 1087 • WAUCHULA, FL 33873-1087  
(863) 773-4159 • FAX # (863) 773-9363  
office@flfertilizer.com

October 10, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

My name is Keith Davis. I am a citrus grower, fertilizer and agricultural chemical supplier. I own approximately 175 acres of citrus, and make recommendations for many customers in the citrus industry.

I strongly support AgLogic efforts to register AgLogic 15GG for use on citrus in the state of Florida. As a citrus grower and chemical supplier, with almost 40 years of experience, I have seen firsthand what Aldicarb does for a citrus tree. Aldicarb makes it "Healthy"! Why? It reduces nematodes on the roots, and controls piercing and sucking insects. Aldicarb also increases pound solids of fruit, enables it to handle stress from cold weather, and should help trees survive and be able to withstand the effects of citrus greening (HLB) bacteria.

Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements.

AgLogic 15GG would be a great product to have for Florida citrus, to keep this great industry strong and viable.

Sincerely,



Keith Davis













**From:** Beck, Nancy [Beck.Nancy@epa.gov]  
**Sent:** 8/13/2018 12:51:58 AM  
**To:** Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Baptist, Erik [Baptist.Erik@epa.gov]  
**Subject:** FW: Temik/AgLogic  
**Attachments:** Aldicarb SLN 8-6-2018 revised after meeting with AgLogic\_clean.doc

## Deliberative Process / Ex. 5

\*\*\*\*\*

Nancy B. Beck, Ph.D., DABT  
Deputy Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
P: 202-564-1273

### Personal Matters / Ex. 6

[beck.nancy@epa.gov](mailto:beck.nancy@epa.gov)

---

**From:** Guilaran, Yu-Ting  
**Sent:** Friday, August 10, 2018 9:26 AM  
**To:** Beck, Nancy <Beck.Nancy@epa.gov>; Keigwin, Richard <Keigwin.Richard@epa.gov>  
**Cc:** Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Keller, Kaitlin <keller.kaitlin@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Pease, Anita <Pease.Anita@epa.gov>  
**Subject:** RE: Temik/AgLogic

Here it is...

Regards,

Yu-Ting Guilaran, P.E.  
Director

Pesticide Re-evaluation Division (PRD)  
Office of Pesticide Programs  
Office of Chemical Safety and Pollution Prevention  
(tel) 703 308 0052  
(fax) 703 308 8005  
Mail code 7508P  
Room number PY 59623

---

**From:** Beck, Nancy  
**Sent:** Friday, August 10, 2018 9:18 AM  
**To:** Keigwin, Richard <Keigwin.Richard@epa.gov>  
**Cc:** Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Keller, Kaitlin <keller.kaitlin@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Guilaran, Yu-Ting <Guilaran.Yu-Ting@epa.gov>; Pease, Anita <Pease.Anita@epa.gov>  
**Subject:** Re: Temik/AgLogic

Attachment did t come through. Thanks.

\*\*\*\*\*

Nancy B. Beck, Ph.D., DABT  
Deputy Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
P: 202-564-1273

**Personal Matters / Ex. 6**

[beck.nancy@epa.gov](mailto:beck.nancy@epa.gov)

On Aug 10, 2018, at 9:12 AM, Keigwin, Richard <[Keigwin.Richard@epa.gov](mailto:Keigwin.Richard@epa.gov)> wrote:

## Deliberative Process / Ex. 5

Rick Keigwin  
Director, Office of Pesticide Programs  
U.S. Environmental Protection Agency  
Phone: 703-305-7090  
Website: [www.epa.gov/pesticides](http://www.epa.gov/pesticides)  
Sent from my iPhone

Begin forwarded message:

**From:** "Keigwin, Richard" <[Keigwin.Richard@epa.gov](mailto:Keigwin.Richard@epa.gov)>  
**To:** "Baptist, Erik" <[baptist.erik@epa.gov](mailto:baptist.erik@epa.gov)>, "Messina, Edward" <[Messina.Edward@epa.gov](mailto:Messina.Edward@epa.gov)>  
**Cc:** "Beck, Nancy" <[Beck.Nancy@epa.gov](mailto:Beck.Nancy@epa.gov)>, "Bertrand, Charlotte" <[Bertrand.Charlotte@epa.gov](mailto:Bertrand.Charlotte@epa.gov)>  
**Subject:** RE: OPP General Agenda Item; Temik

Message

**From:** Keigwin, Richard [Keigwin.Richard@epa.gov]  
**Sent:** 8/10/2018 1:26:57 PM  
**To:** Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Baptist, Erik [Baptist.Erik@epa.gov]  
**CC:** Keller, Kaitlin [keller.kaitlin@epa.gov]; Messina, Edward [Messina.Edward@epa.gov]; Guilaran, Yu-Ting [Guilaran.Yu-Ting@epa.gov]; Pease, Anita [Pease.Anita@epa.gov]  
**Subject:** Temik Response  
**Attachments:** Aldicarb SLN 8-6-2018 revised after meeting with AgLogic\_clean.doc; ATT00001.htm; ATT2.pdf; ATT00002.htm; ATT1.pdf; ATT00003.htm; 3588985\_1.pdf; ATT00004.htm

## Deliberative Process / Ex. 5

Rick Keigwin  
Director, Office of Pesticide Programs  
U.S. Environmental Protection Agency  
Phone: 703-305-7090  
Website: [www.epa.gov/pesticides](http://www.epa.gov/pesticides)  
Sent from my iPhone

Begin forwarded message:

**From:** "Keigwin, Richard" <Keigwin.Richard@epa.gov>  
**To:** "Baptist, Erik" <baptist.erik@epa.gov>, "Messina, Edward" <Messina.Edward@epa.gov>  
**Cc:** "Beck, Nancy" <Beck.Nancy@epa.gov>, "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>  
**Subject:** RE: OPP General Agenda Item; Temik

## Personal Matters / Ex. 6

## Deliberative Process / Ex. 5

**From:** Baptist, Erik  
**Sent:** Thursday, August 09, 2018 10:53 AM  
**To:** Keigwin, Richard <Keigwin.Richard@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>  
**Cc:** Beck, Nancy <Beck.Nancy@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>  
**Subject:** OPP General Agenda Item; Temik

Rick and Ed,

## Deliberative Process / Ex. 5

Thanks,

**Erik Baptist**

Senior Deputy General Counsel

Office of General Counsel

U.S. Environmental Protection Agency

1200 Pennsylvania Ave., NW

Washington, DC 20460

(202) 564-1689

[baptist.erik@epa.gov](mailto:baptist.erik@epa.gov)

July 2, 2018

**BY ELECTRONIC AND OVERNIGHT MAIL**

Rick Keigwin, Director  
Office of Pesticide Programs  
USEPA Headquarters  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N. W.  
Washington, DC 20460-0001  
([keigwin.richard@epa.gov](mailto:keigwin.richard@epa.gov))

Nancy Beck, Deputy Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
USEPA Headquarters  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N. W.  
Washington, DC 20460-0001  
([beck.nancy@epa.gov](mailto:beck.nancy@epa.gov))

Re: Critically Important Pesticide SLN to Help Embattled Florida Citrus Industry

Dear Sir and Madame:

This letter requests your – and the Agency’s – support for a FIFRA Section 24(c) Special Local Need registration (SLN) for AgLogic 15GG, a granular insecticide containing 15% aldicarb, to control Asian citrus psyllid, citrus rust mites, spider mites, aphids and nematodes on Florida citrus. The SLN application was filed with the Florida Department of Agriculture and Consumer Services (FLDACS) on June 1, 2018 by AgLogic Chemical, LLC, the sole U.S. registrant of aldicarb.

The key facts are these:

1. The Florida citrus industry is on “the brink of annihilation” (Dr. Phillip Stansly, Professor of Entomology, U. Fl., 10/16/17 Letter). It has been ravaged by the citrus greening disease (HLB), transmitted by the Asian citrus psyllid (ACP), and there has been an **80% loss** in production of citrus statewide.<sup>1</sup>
2. Florida growers are losing the battle against the spread of citrus greening disease. At best, the current toolbox of chemical treatments only modestly retards the advance of the disease, but does nothing to improve production. As stated by one grower: “Absent better tools citrus growers will be out of business soon!” (Tim Dooley, Vice President and General Manager, Blue Goose Growers, LLC, 10/11/17 Letter). The intensive use of foliar treatments to fight psyllids has also resulted in other pest problems, including the development of resistance as well as spikes in mite, weevil, and aphid populations.

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<sup>1</sup>. At the time HLB was first discovered in 2003-2004, Florida orange production totaled 242 million boxes. In April 2018, the USDA National Agricultural Statistics Service estimated that just 45 million boxes of oranges would be harvested in 2017-2018 – a decrease of 197 million boxes, or 81%. USDA/NASS, Citrus April Forecast 2017-2018 Season (April 10, 2018) *available at*: [https://www.nass.usda.gov/Statistics\\_by\\_State/Florida/Publications/Citrus/Citrus\\_Forecast/2017-18/cit0418.pdf](https://www.nass.usda.gov/Statistics_by_State/Florida/Publications/Citrus/Citrus_Forecast/2017-18/cit0418.pdf).



3. ***The Florida citrus industry – including the largest growers in the state – enthusiastically support an SLN registration for AgLogic 15GG.*** Indeed, several prominent growers have taken the unusual step of submitting both signed affidavits (Attachment 1) and letters (Attachment 2) detailing why they so urgently need aldicarb.<sup>2</sup> As they explain, a unique attribute of aldicarb is that it stimulates tree health and root growth and ***markedly increases fruit size and yield***, precisely what growers need now to stay in business. Aldicarb is also effective against many pests, including psyllids, mites and nematodes, among others. As one grower has testified: “Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.” (John Gose, General Manager, Lykes Bros. Inc.; 5/17/18 Affidavit).
4. Florida citrus growers are familiar with aldicarb because they used the product (under the trade name, TEMIK 15G) with great results for several decades (~1978-2010), until Bayer, the sole registrant, *voluntarily* cancelled the registration and withdrew from the market, pursuant to a well-publicized corporate decision to exit all WHO Class 1 products.
5. FLDACS has advised AgLogic that it will not approve the SLN unless it is assured that EPA will not disapprove it. It is our understanding that EPA has not yet had the opportunity to review the SLN, attached affidavits and other materials demonstrating the Special Local Need for aldicarb. However, we also understand that there have been early indications by staff members in EPA’s OPP that OPP is inclined to ***deny*** the SLN.

We submit that OPP’s current disinclination to approve the SLN is unjustified and contrary to the public interest. The following points may clarify why we believe this:

6. At the time Bayer cancelled its aldicarb registrations, EPA was concerned about possible dietary risks to infants and children from consumption of food and drinking water containing aldicarb residues. For this reason, AgLogic’s subsequently-obtained registration for AgLogic 15GG, which is approved for use on cotton, peanuts and certain other crops, did not include use on citrus.
7. Over the past several years, aldicarb has undergone Registration Review. During this process, AgLogic implemented significant changes to the product label that result in aggregate dietary exposures to aldicarb well below the 2010 EPA Level of Concern. EPA has recently issued an Interim Registration Review Decision concluding that aldicarb may continue to be registered.
8. To assist the Agency in its assessment of aldicarb, including for use on citrus under a Florida SLN, AgLogic commissioned Dr. Beth Mileson, Principal Scientific Consultant, TSG Consulting, to conduct an acute dietary exposure and risk assessment for aldicarb.

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<sup>2</sup> For convenience, each attachment also includes a cover sheet highlighting relevant excerpts from the affidavits and letters, respectively.

This risk assessment was submitted to EPA earlier this year. Dr. Milesen's affidavit (included in Attachment 1) affirms that she conducted the risk assessment using models and methods identical to those used by EPA's risk assessors. The risk assessment demonstrates that 20% of the US citrus crop may be treated with aldicarb and dietary exposures (including food and water) for all sub-populations are well below any level of concern.

In short, there is no scientific basis for EPA to disapprove the SLN due to dietary risk.

\* \* \*

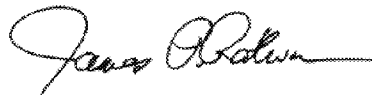
In summary, this SLN is critically important to a Florida citrus industry that desperately needs help. We urge you to take the steps necessary to ensure that OPP makes a full and fair assessment of the SLN, including its substantial benefits to American growers and consumers.

Time is of the essence. Application of AgLogic 15GG must occur during the dry season, which runs from mid-November through April at the latest. Even after the SLN is approved, several additional steps must be taken before applications can occur. Most important, AgLogic must identify applicators that have (or are willing to purchase) the necessary application equipment, and these applicators must be trained to ensure compliance with AgLogic's product stewardship program. Applicators must also petition FLDACS for permission to apply the product. Aldicarb has not been used on citrus since 2011, so considerable lead time is required to restart applications.

In furtherance of the process, AgLogic requests the opportunity to meet with the Agency as soon as possible to discuss the SLN and respond to any questions or concerns OPP may have. Depending on schedule, it is likely that one or more citrus growers and FLDACS officials will attend the meeting as well.

Thank you in advance for your attention to this important matter. Please do not hesitate to contact us if you have any questions or would like to discuss these issues further.

Sincerely,



James P. Rathvon  
Cristen S. Rose  
Counsel for AgLogic Chemical, LLC

Attachments

cc (by email and overnight mail):  
Richard Gebken, OPP  
Tawanda Maignan, OPP  
Antoine Puech, President/CEO of AgLogic



# **ATTACHMENT 1**

## **Affidavits from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida**

The attached 10 sworn affidavits were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the letters of support that were submitted by these researchers and citrus growers in late 2017.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC – 5/21/18**  
(Also see letter of support from Dr. Philip Stansly, dated 10/16/17)

*Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”*

*One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.*

*Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.*

**2. Walter T. Jerkins, President, Premier Citrus LLC – 5/23/18.**  
(Also see letter of support from Walter T. Jerkins, dated 10/11/17)

*Aldicarb is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.*

*Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.*

*The yield response from the use of aldicarb is robust, resulting in a sustained yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.*

*The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity - precisely the effects that are so desperately needed now by the citrus industry.*

**3. John Gose, General Manager, Lykes Bros. Inc – 5/17/18**  
(Also see letter of support from John Gose, dated 10/2/17)

*Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.*

*A serious drawback of foliar insecticides is that they can wipe out pollinators and other "beneficials" (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.*

*In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly higher pounds of solids per box, producing a very positive net economic return.*

*The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc – 4/27/18**  
(Also see letter of support from William Roe, dated 9/28/17)

*Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest*

*management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.*

*This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both - suppress psyllids and protect beneficials during bloom time - because of its systemic mode of action.*

*Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.*

**5. Dave Owens, Director of Chemical Sales, Alico Citrus -- 5/29/18**

(Also see letter of support from Steve Ryan, President, Alico Citrus, dated 10/10/17)

*Alicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides*

*The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.*

*Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 5/17/18**  
(Also see letter of support from Tim Dooley, dated 10/11/17)

*Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.*

*In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.*

*In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC -- 5/xx/18**  
(Also see letter of support from Marvin Kahn, dated 11/3/17)

*Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better - and are healthier - than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.*

*Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.*

*Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.*

**8. Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP -- 5/23/18**  
(Also see letter of support from Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP, dated 10/20/17)

*When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.*



*The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.*

**9. John Barden, Vice President, Barben Fruit Company Inc – 5/30/18**

(Also see letter of support from John Barden, dated 10/13/17)

*The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ACP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.*

*A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.*

*We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficial when we used aldicarb.*

**10. Dr. Beth Milesen, Principal Scientific Consultant, TSG Consulting – 5/24/18**

*The modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure. Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.*

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF PHILIP A. STANSKY, Ph.D.**

I, Philip A. Stansky, do solemnly swear as follows:

1. I am Professor of Entomology at the University of Florida (UF), Southwest Florida Research and Education Center, 2686 State Road 29 North, Immokalee, FL 34142. I joined UF in 1986, and moved to the Immokalee location in 1989.

2. I hold a Ph.D. in Entomology from Texas A&M (1985), an M.S. in Zoology from the University of Oklahoma (1978), and a B.S. in Zoology from Wayne State University (1967).

3. I am a research and extension entomologist focused on the integrated management of pests affecting major crops grown in southwest Florida, with emphasis on citrus and vegetables. I am the lead author or co-author of more than 538 scientific publications and 158 extension publications in my field, including 172 peer-reviewed articles. I am also the editor of a book and author of 9 book chapters relating to pest management.

4. I develop and test integrated systems of economic and sustainable pest management and their component tactics. I consult with members of the agricultural community, and provide information, training and diagnostic services in collaboration with county and multi-county agents.

5. A key focus of my work for the last 13 years has been and remains the citrus greening disease or huanglongbing (HLB), transmitted by the Asian citrus psyllid (ACP)

*Diaphorina citri*. My work is multifaceted and has included research on the use of aldicarb to control ACP and other citrus pests and to improve citrus yields.

6. Aldicarb (brand name, Temik) was registered for use on citrus in Florida for nearly 30 years until Bayer voluntarily cancelled all of its aldicarb registrations and exited the business at the end of 2010. Subsequently, AgLogic Chemicals, LLC obtained an EPA registration for an aldicarb product similar to Temik, called, AgLogic 15G, labeled for use on several crops not including citrus. AgLogic 15 G was subsequently approved in 2017 for use in Florida on peanuts and cotton by the Florida Department of Agriculture and Consumer Services.

7. I am aware that, at the request of numerous citrus producers, AgLogic Chemicals LLC applied to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG for use on citrus in Florida.

8. In a letter dated October 16, 2017 (attached), I expressed support for this SLN registration in the strongest possible terms. As stated in my letter: “It may not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida’s iconic citrus industry.” Accordingly, I urged that “no effort be spared in registering aldicarb again for citrus in Florida.”

9. I write this Affidavit to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida today.

10. Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”

11. Aldicarb is applied to the soil where it is absorbed by the tree roots and works systemically. As a result, aldicarb provides continuous pest control over an extended period of time, on the order of 90-120 days. At the same time, aldicarb is known to increase root growth, which promotes greater tree health and can lead to larger and more abundant fruit. Our research

cited below from a large scale replicated experiment in a commercial orange grove confirmed increased yield from trees treated with aldicarb. Stansly, P. A., and R. E. Rouse. 1994.

Pest and yield responses of citrus to aldicarb in a flatwoods grove. Proceedings of the Florida State Horticultural Society 107: 69-72.

12. Aldicarb applied through granular applicators below the soil surface has well established integrated pest management and environmental advantages over pesticides that are repeatedly applied through foliar sprays. AgLogic 15 G aldicarb is directly applied into the soil where it is absorbed by the roots, and works systemically against a broad range of pests. As a result, it does not have the same adverse impact as many foliar insecticide sprays on pollinators and other “beneficials” (*e.g.*, wasps, lady beetles, lace wings, and spiders) – which are key to effective integrated pest management programs. The safeguards and stewardship programs that have been adopted over the years for aldicarb provide additional assurance that aldicarb can be used on citrus safely and effectively without harming human health or the environment.

13. The insecticides currently available to citrus growers are, for the most part, applied by ground or aerial spray which may be repeated every 3-4 weeks. Rain events – which are not infrequent during the growing season in Florida – can rapidly wash away these residues, further reducing efficacy. In contrast, once aldicarb is absorbed by the tree roots it will remain active for several months.

14. One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.

15. Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.

16. Another problem faced by citrus growers today is citrus canker. To control canker, growers typically apply a copper-based fungicides at regular intervals. Unfortunately, copper inhibits beneficial mites that control rust mites. As a result, rust mites are a significant problem in many citrus groves where copper has been applied to combat canker. Again, aldicarb is highly effective in providing residual control of rust mites reducing the need for additional sprays.

17. As I noted in my support letter, Florida's iconic citrus industry is in a life or death struggle with HLB for survival. Growers face a host of pest problems, most importantly ACP/HLB, but also rust mites, canker, nematodes, aphids, and others. Hurricane Irma has only exacerbated the difficulties growers now face. In these dire circumstances, growers need more and better management tools, particularly in the face of growing ACP resistance to the neonicotinoids. Aldicarb – a carbamate with a different mode of action– has a proven track record with the Florida citrus industry by providing broad control of psyllids and other important pests while enhancing root growth and fruit production. For all these reasons, I urge the Department to approve an SLN registration for AgLogic 15GG.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on 21 May 2018.

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Philip A. Stansly, Ph.D.

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF WALTER T. JERKINS, JR.**

I, Walter T. Jerkins, Jr., do solemnly swear as follows:

1. I am the President of Premier Citrus and Premier Citrus Management, 635 66<sup>th</sup> Ave. SW, Vero Beach, FL, 32968.

2. Premier is among the largest citrus producers in Florida, managing over 20,000 acres of citrus groves, located in seven (7) counties in Florida. Premier's fresh fruit package house also is one of the largest in Florida.

3. I have more than 40 years of experience in the citrus industry. After graduating from the University of Florida with a major in agriculture in 1975, I worked for about four (4) years at Southern Fruit Distributors, a Florida grower/processor. In 1980, I joined Blue Goose Growers, one of the state's largest grove management company, where I worked for more than 32 years. In 2013, I joined Premier as its President.

4. I am a founding member of Citrus Research and Development Foundation, Inc. (CRDF) and was its first President, a position I held for nine years (2011-Jan. 2018). The CRDF is headed by a 13-member Board of Directors that includes individuals from industry, academia, and government. The CRDF raises money and issues research grants to help companies develop products to combat citrus greening disease (HLB). Through my involvement in CRDF and knowledge of its research, I am well informed about the pest control products currently available

to the citrus industry and products still in the development pipeline. Aldicar is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.

5. I am not aware of any other single product or combination of products that provides the same yield improvement potential to the industry that aldicarb could provide, as discussed below.

6. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.

7. Premier enthusiastically supports AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 11, 2011 (attached), I affirmed Premier's strong support for this SLN registration.

8. The purpose of this Affidavit is to provide further explanation why aldicarb is urgently needed by citrus growers.

9. I have many decades of experience with the use of aldicarb on citrus. During the three decades that I was with Blue Goose Growers, we regularly used aldicarb (Temik) in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently had very positive experiences with aldicarb, which we regarded as a key tool in our arsenal to control insect pests and promote tree growth and fruit production. Year after year we found that when we used aldicarb, trees were healthier and more productive.

10. Premier also used aldicarb very regularly on virtually all of its citrus acres during the many years it was available. Based on my surveying of our grove managers here, Premier's positive experiences with aldicarb were very similar to those of Blue Goose Growers.

11. I have had discussions about aldicarb with many other growers in the industry over the years, including while I was CRDF President. The nearly universal consensus among citrus

producers is that aldicarb is a uniquely valuable product that offers a combination of benefits not provided by any other product or combination of products.

12. Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.

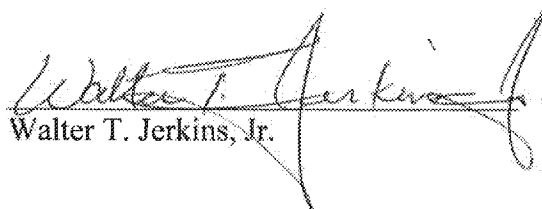
13. The yield response from the use of aldicarb is robust, resulting in a *sustained* yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.

14. The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity – precisely the effects that are so desperately needed now by the citrus industry.

15. For all these reasons, Premier urges the Department in the strongest possible terms to approve AgLogic’s application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.

  
Walter T. Jerkins, Jr.



**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF JOHN GOSE**

I, John Gose, do solemnly swear as follows:

1. I am General Manager for Lykes Bros, Inc., 7 Lykes Road, Lake Placid, FL, 33852.
2. Lykes Bros a long-time major player in the Florida citrus industry. We have over 6,000 acres of active citrus groves. Over the last five years we have lost 50% of our citrus acreage due to Citrus Greening.
3. I have more than 40 years of experience in the citrus industry. My family owned citrus groves and I worked in those groves as a teenager. After I graduated from the University of Florida with a degree in agriculture/fruit crops in 1981, I accepted a position at Lykes Bros. I have worked at Lykes Bros in citrus management my entire career.
4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
5. We at Lykes Bros enthusiastically support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 2, 2011 (attached), I affirmed Lykes Bros' strong support for this SLN registration. As stated in my letter: "aldicarb ... is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."

6. The purpose of this Affidavit is to provide further explanation why citrus growers need aldicarb back in their toolbox.

7. Lykes Bros regularly used aldicarb (Temik) in citrus groves we managed for more than two decades, until it was voluntarily withdrawn from the market by Bayer in 2010. We consistently had very positive experiences with aldicarb. Based on our experiences, we consider aldicarb a uniquely valuable product that offers a combination of benefits not provided by any other registered product or combination of products.

8. Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.

9. A serious drawback of foliar insecticides is that they can wipe out pollinators and other “beneficials” (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.

10. In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly *higher pounds of solids per box*, producing a very positive net economic return.

11. The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root

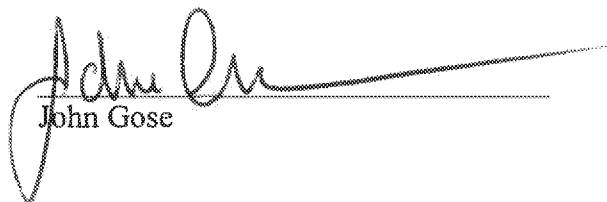
system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.

12. Another serious pest problem associated with citrus production in our groves is root weevils. Citrus greening disease interferes with the transport of sugars and other nutrients from the leaf canopy to the roots through the phloem. To compensate for this, we add nutrients to the soil to help feed the root system. Doing this, however, also supports root weevils (and nematodes). It is not an overstatement to say that root weevils are now a huge problem for Lykes Bros. Aldicarb is needed to combat this problem. When we were able to use aldicarb, we had few problems with root weevils. Root weevil larvae need moisture to come up from the soil and start feeding on the roots. When it was available, we applied aldicarb to soil in November and December. This application timing was perfect for knocking out root weevils before the next fruiting season.

13. For all these reasons, Lykes Bros urges the Department in the strongest possible terms to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 17, 2018.

  
John Gose

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**AFFIDAVIT OF WILLIAM G. ROE II**

I, William (Bill) G. Roe II, do solemnly swear as follows:

1. I am Vice President and Chief Operating Officer for Wm. G. Roe & Sons, Inc. My family has worked in the citrus industry for nearly a century. Wm. G. Roe & Sons, Inc., founded by my grandfather in 1927, is a long-standing player in the Florida citrus industry. We own, manage, or operate approximately 3,000 acres of citrus in various locations across the citrus belt. Our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are perennially one of the top 10 packers in the state. We are also the leading shipper of tangerines in Florida and our brand, Noble, is highly respected in the markets. We have the only private citrus plant breeding program in Florida, which specializes in tangerines.

2. I have more than 40 years of experience in the citrus industry. After graduating from Vanderbilt University in 1975, and taking courses in citriculture at Lake Alfred Citrus Research Station, FL, I began working full-time at Wm G. Roe & Sons in 1976. Prior to that, I worked part-time as a tractor driver and mechanic at the company, starting when I was in high school. I have held several positions at the company, from grove area manager to eventually production manager, a position I held for nearly 20 years. I also worked as our packing house manager for 10 years.

3. I served as President of the Florida Citrus Managers Association from 1986-87, and after appointment to the Florida State PRC, was its Chairman in 1996.

4. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. As stated in my letter dated September 28, 2017 (attached), Wm. G. Roe & Sons strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.

6. Today in Florida we have the benefit of a host of new insecticide chemistries for topical application through spraying. At the same time, Florida has been beset with the citrus greening disease (HLB,) which has manifested itself in a most virulent fashion. Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.

7. This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are

prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both – suppress psyllids and protect beneficials during bloom time – because of its systemic mode of action.

8. While the discussion in the previous paragraph focuses on psyllids, the same point applies to the various members of the scale family, mealybugs, and to some degree leaf miners. Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.

9. A phenomena of the past 12 years since citrus Canker has become endemic in the state has been the necessity of spraying copper every 21 days to control Canker lesions on the peel of many varieties. Canker lesions allow secondary infections to occur in the wounds of the fruit's peel, eventually causing the fruit to drop from the tree, so its control is mandatory for commercial growers. Although we have Streptomycin permitted for topical application and which helps, its application does not allow reduced applications of copper during the growing season. On the down side, application of copper creates a favorable micro-climate for mites to harbor on the peel of the fruit, making them quite difficult to control. When the fruit is quite susceptible during the late spring to Canker, the weather is generally hot and dry, which is perfectly suited for mite build-up even without copper deposits on the surface of the leaves and fruit. Aldicarb provides excellent mite control for an extended period during the spring, is not intrusive to either beneficials or honeybees, and accordingly was one of the reasons why most of the fresh fruit industry used aldicarb when it was available.

10. Another important reason why aldicarb is need by citrus growers today is that it promotes tree health and fruit production – what growers have called a PGR (plant growth regulatory) effect. It is hard to quantitatively assess aldicarb's PGR effect for citrus, but its use causes fruit to have enhanced high peel color and both measurably larger and more uniform size. It could be the combination of aldicarb negating the feeding and sucking of plant bugs and its impact on reducing the nematode population simultaneously, but in any case it is the only chemistry I have used in my 42 years in the industry which enhances the tree's performance and which unquestionably enhances the value of the fruit produced.

11. As growers, we are constantly trying to compensate for the much diminished root system caused by HLB by providing additional fertilizer and nutritional elements. Correspondingly, we are having to apply more foliar copper and leaf nutrients which are exacerbating mite populations. Aldicarb would be a most useful tool for the grower community and the environment by virtue of its providing enhanced control of a broad range of pests while enabling the grower to reduce topical pesticides.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April, 27 2018.

  
William (Bill) G. Roe II

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**AFFIDAVIT OF DAVID OWENS**

I, David Owens, do solemnly swear as follows:

1. I am the Director of Chemical Sales for Alico Citrus, 12010 Hwy 70, Arcadia, FL, 34266. I have held this position since the end of 2015. My responsibilities at Alico include purchasing from, and liaising with, suppliers of pesticides, fertilizers, and other chemical products for use in citrus.

2. Alico, based in Fort Myers, FL, is among the largest citrus growers in the United States, with some 32,000 acres of citrus groves. In 2017, Alico was the country's largest citrus producer, producing 7.6 million boxes of fruit.



3. Prior to joining Alico, I worked in sales for Rhone Poulenc, and its corporate successors, Aventis and Bayer, for more than 20 years. During this time, I was responsible for the largest sales territory in Florida for the product, Temik, containing aldicarb. My work included talking with growers, interfacing with extension service scientists, and dealing with issues relating to registration, product application, stewardship and other matters. Overall, I have more than 35 years of experience with the citrus industry.

4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. We at Alico strongly support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 10, 2017 from Steve Ryan, President of Citrus Operations (attached), Alico affirmed its support for an SLN registration for aldicarb for citrus. As stated in that letter: "It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications. .... It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated."

6. I and Alico stand by these statements in the October 10, 2017 letter. The purpose of this Affidavit is to explain further why aldicarb is urgently needed by citrus growers, as it fills a need not met by any other product, or combination of products, currently available.

7. Alico has a long, positive history with aldicarb. Alico regularly used aldicarb (Temik) in its citrus groves for at least 20 years, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. Alico's very favorable experiences with aldicarb that spanned decades are the foundation for its strong support for an SLN registration for aldicarb.

8. Aldicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree

growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides.

9. No other product on the market has the same positive effects on tree health and fruit production that Alico – and many other citrus growers – have obtained with the use of aldicarb. During the years Alico used Temik/aldicarb, it realized a very favorable return on its investment in the use of the product year after year.

10. The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.

11. Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.

12. Although there are other products that are labeled for psyllid control, Alico has found that the efficacy of these products for psyllid control has plateaued in recent years. There is great concern at Alico and in the industry that resistance to these chemistries, particularly “neonics” such as imidacloprid, is growing. This is another reason why aldicarb is urgently needed at this time. Aldicarb, a carbamate class pesticide, provides a different mode of action and its use would greatly assist in managing psyllid resistance.

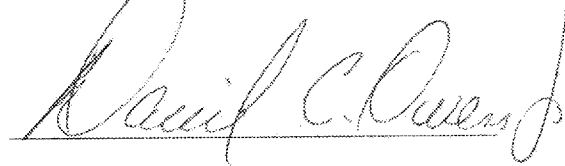
13. Aldicarb also provides well established environmental benefits. Because it is injected into the soil, it poses far less risk of harm to pollinators and other non-target beneficial insects than alternatives that are applied by foliar spray. The ability to use aldicarb would materially reduce the number of foliar applications of pesticides needed to control early season psyllids, and rust mites, greatly reducing the potential adverse impacts of harsher sprays on

beneficials and the environment. Aldicarb also has a much longer residual effect because it is distributed under the soil, and works best in wet soil. In contrast, foliar applications wash out in Florida's frequent rains and have to be repeated more often. It is fair to say that aldicarb is unique when it comes to controlling pests, while also increasing tree vigor and yields. There are also well established benefits of aldicarb on young trees. Aldicarb gives increased root flushes, and promotes the growth of young non-bearing and bearing trees.

14. For all these reasons, I urge the Department to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 29, 2018.

A handwritten signature in dark ink, appearing to read "David C. Owens", written over a horizontal line.

David Owens

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF TIMOTHY J. DOOLEY**

I, Timothy J. Dooley, do solemnly swear as follows:

1. I am the Vice President and General Manager of Blue Goose Growers, a citrus grove and crop management company based in Ft. Pierce, Florida. I have worked for Blue Goose Growers for approximately 27 years.
2. Blue Goose Growers manages approximately 10,000 acres of citrus trees.
3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
4. As stated in my letter dated October 11, 2017 (attached), Blue Goose Growers strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.
5. Citrus growers in Florida, including groves under Blue Goose Growers' management, have a long history of using aldicarb (Temik) successfully to control pests and threaten Florida's citrus crops.

6. Since aldicarb was removed from the market, the health of the Florida citrus industry has declined immensely. HLB is ravaging the industry, and growers are suffering from declining tree health and decreased fruit size and yield.

7. Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.

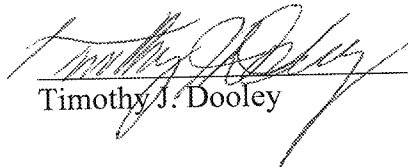
8. In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.

9. In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often.

10. There is no product or combination of products available to citrus growers today that offers the benefits of aldicarb. In addition to the longer residual control it provides, it is critically needed because it controls a wide range of pests, enhances tree health, and increases fruit production.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May, 17, 2018.

  
Timothy J. Dooley

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF \_\_\_\_\_) )  
Application of AgLogic Chemicals, LLC \_\_\_\_\_) )  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_) )  
Registration for \_\_\_\_\_) )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_) )  
\_\_\_\_\_)

**AFFIDAVIT OF MARVIN KAHN**

I, Marvin Kahn, do solemnly swear as follows:

1. I am the primary owner of Kahn Citrus Management (KCM), based in Sebring, FL. KCM manages thousands of acres of citrus in Polk, Highlands, Hardee and DeSoto counties, FL.

2. My father entered the citrus industry when he purchased his first orange grove in the 1930s. I have been a part of the citrus industry my entire working life, and have more than 60 years of experience in citrus management. (I just celebrated my 85<sup>th</sup> birthday.)

3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.

4. As stated in my letter dated November 3, 2017 (attached), we at KCM fully support AgLogic's SLN application. Our support for this SLN registration is based on decades of favorable experiences that we have had with aldicarb (Temik), up until the end of 2010, when it was voluntarily withdrawn from the market by Bayer.

5. The purpose of this Affidavit is to explain further why aldicarb is so urgently needed by KCM and other citrus growers in Florida.

6. Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including

nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better – and are healthier – than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.


7. Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.

8. Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.

9. In summary, if aldicarb were available, growers would be able to control psyllids, rust mites, and other pests with fewer foliar sprays involving harsher chemistries. Overall, trees would be healthier and more productive, and there would be less damage to honeybees and other beneficials.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April \_\_, 2018.

  
\_\_\_\_\_  
Marvin Kahn

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF \_\_\_\_\_) )  
Application of AgLogic Chemicals, LLC \_\_\_\_\_) )  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_) )  
Registration for \_\_\_\_\_) )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_) )  
\_\_\_\_\_)

**AFFIDAVIT OF CODY LASTINGER**

I, Cody Lastinger, do solemnly swear as follows:

1. I hold the position of Manager – Horticultural Services for Consolidated Citrus, LP (“Consolidated”), 63 Barn Road, Venus, FL 33960. Consolidated is among the largest citrus producers in the United States, with some 30,000 acres of citrus groves.

2. I graduated from the University of Florida in 2013 with a Master’s in Agronomy and Weed Science. I received a second Master’s in Aquatic Plant Management from the University of Florida Gainesville in 2017. I became Manager – Horticultural Services at Consolidated very recently, after the former long-time Manager, Michael J. Stewart, recently retired.

3. I am aware that AgLogic is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG aldicarb pesticide for use on citrus in Florida.

4. In a letter dated October 20, 2017 (attached), former manager Michael Stewart expressed Consolidated’s strong support for this SLN registration. This support is based on Consolidated’s many decades of favorable experiences with aldicarb (brand name, Temik), up through 2010, when it was voluntarily cancelled by Bayer. As stated in our October 20, 2017 letter: “When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective

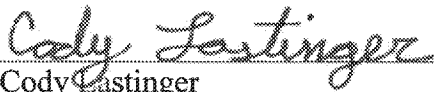


pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.”

5. The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 23, 2018.

  
Cody Castinger

BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES

)  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FLRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
)

**AFFIDAVIT OF ROBERT H. BARBEN AND JOHN P. BARBEN**

We, Robert H. Barben and John P. Barben, do solemnly swear as follows:

1. I, Robert H. Barben, am President and I, John P. Barben, am Vice President, of Robert J. Barben, Inc., 21 East Pine Street, Avon Park, FL 33825. Robert J. Barben, Inc. is a family business that traces its origins back to the 1920s. We have been in the business of growing and managing citrus for many decades. We currently manage about 1800 acres of citrus located in four counties in Florida.

2. We are aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

3. We at Robert J. Barben, Inc. strongly support AgLogic's SLN application for the use of aldicarb on citrus. In a letter dated October 13, 2017 (attached), we affirmed our unqualified support for this SLN registration.

4. The purpose of this Affidavit is to provide further explanation as to why aldicarb is urgently needed by Florida citrus growers today.

5. Our company has extensive experience with the use of aldicarb on citrus. During the 2-3 decades that aldicarb (brand name, Temik) was available to us, we used it regularly in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently saw very positive results with aldicarb. We found that when we used aldicarb, trees were healthier and more productive.

6. The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them.

7. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ASP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.

8. A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.

9. We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficials when we used aldicarb. Aldicarb is applied to the soil, not topically, and works systemically, so there is far less direct

exposure to beneficials with aldicarb.

10. The addition of aldicarb, which is a carbamate with a different mode of action, would be very helpful to citrus growers in managing pesticide resistance.

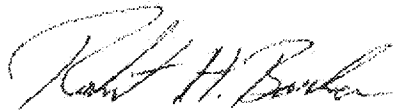
11. If aldicarb were available, we would apply it to the soil in winter months. This would enable us to reduce the number of foliar sprays by at least 2-3 during the spring months, which would reduce adverse impacts on beneficials.

12. Another reason why we urgently need aldicarb back is that it aldicarb increases root growth and fruit production. In our experience, using aldicarb is like giving the tree a steroid; the trees are healthier and there is a very definite growth response. Even more important economically, aldicarb increases the *pounds solids* produced by the tree. No other product compares to aldicarb in stimulating tree growth and fruit production.

13. In summary, aldicarb offers a unique combination of benefits not offered by any other single registered product or combination of registered products. These benefits include broad, long-lasting control of rust mites, minimal impacts on beneficials, and increased tree health and fruit production. These benefits are urgently needed by citrus growers now, more than ever. For these reasons, Robert J. Barben, Inc. urges the Department to approve an SLN registration for AgLogic 15 GG.

We declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.



Robert H. Barben



John P. Barben

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF BETH E. MILESON, PH.D.**

I, Beth E. Milesen, do solemnly swear as follows:

1. I hold the position of Principal Scientific Consultant, Team Leader, Toxicology at Technology Sciences Group, Inc. (TSG), based in TSG's office at 1101 17<sup>th</sup> Street, N.W., Suite 500, Washington, D.C., 20036. I have worked at TSG since 2001,
2. TSG is a part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG).
3. A copy of my Curriculum Vitae is attached. As reflected therein, I received a Ph.D. in Toxicology from the University of North Carolina in Chapel Hill in 1989. I also hold a Bachelor of Science in Biology/Zoology and Master of Science in Biology from George Washington University, as well as a Masters in Business Administration from George Mason University.
4. I am and have been a board-certified toxicologist, otherwise known as a Diplomate of the American Board of Toxicology, continuously since 1996.
5. I have more than 20 years of experience designing, conducting and reviewing toxicological risk assessments.
6. AgLogic asked me to conduct an acute aggregate dietary exposure and risk assessment for aldicarb using the Dietary Exposure Evaluation Model software with the Food

Commodity Intake Database (DEEM-FCID) using methods identical to those used by the U.S. Environmental Protection Agency (US EPA) in its assessment in 2016.<sup>1</sup>

7. The exposure assessment I conducted for AgLogic was intended to estimate potential exposure of the general US population and all sub-populations to aldicarb assuming that 20% of the US citrus crop is treated with aldicarb. For this assessment I used as a starting point the basic data files and assumptions provided by the US EPA in 2016. In addition to the assumed use of aldicarb on 20% of the citrus crop, two assumptions in my aggregate exposure assessment differed from the US EPA: (1) The US EPA assumed that 100% of the imported crops supported by tolerances are treated with aldicarb, while I assumed that no aldicarb residues were in/on imported crops because aldicarb is not registered anywhere outside the US. (2) The aldicarb residue levels in water that I used in the exposure assessment were provided in a report prepared by Waterborne Environmental for AgLogic.<sup>2</sup> The DEEM modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions as described above.

8. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure.<sup>3</sup> Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results

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<sup>1</sup> US EPA, 2016. Memorandum: Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessments for Registration Review Risk Assessment. From: Ideliz Negrón-Encarnación, to: Susan Bartow. PC Code: 098301, DP Barcode: D430197, Office of Pesticide Programs, Office of Chemical Safety and Pollution Prevention, US Environmental Protection Agency, 3/28/2016. 34 pages.

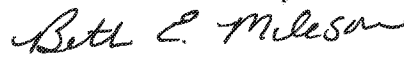
<sup>2</sup> Ritter, A.M. 2017. Aldicarb: Drinking Water Exposure Assessment. Unpublished report by Waterborne Environmental Inc. Study No.: 245.01. November 14, 2017. 22 pages. MRID 50549101.

<sup>3</sup> Milesen, B.E. 2017. Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessment for Proposed Uses. Unpublished report by Technology Sciences Group, Inc. Document No.: 20170230. December 28, 2017. 27 pages. MRID 50549102.

in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 24, 2018.

A handwritten signature in cursive script, appearing to read "Beth E. Miles".

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Beth E. Miles

# Curriculum Vitae Beth E Milesen

## **Beth E. Milesen, Ph.D., DABT**

Technology Sciences Group Inc.

Washington, DC 20036

Phone: (202) 828-8956

email: bmilesen@tsgusa.com

## **EDUCATION**

MBA, George Mason University, Fairfax, VA, (2013)

PhD, Toxicology, University of North Carolina, Chapel Hill, NC (1989)

MS, Biology/Zoology, George Washington University, Washington, DC (1984)

BA, Biology, George Washington University, Washington, DC (1981)

## **PROFESSIONAL EXPERIENCE**

### **Technology Sciences Group Inc. (TSG)**

**2001 to Present**

*Technology Sciences Group Inc. is part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG), and provides state, federal and international expertise on a wide range of scientific and regulatory issues. With experts in regulatory affairs, chemistry, toxicology, environmental fate and risk assessment, TSG provides services in support of the development, registration, compliance and defense of chemically related products. Clients include chemical, pesticide, consumer product, food, personal care and animal health companies, as well as industry groups, trade associations, and law firms.*

### **Principal Scientific Consultant, Team Leader**

#### **Responsibilities include:**

- Create comprehensive toxicology and risk assessment strategies to inform clients' business decisions and achieve their regulatory goals;
- Design and conduct human health and ecological risk assessments to support product stewardship, registrations and certifications;
- Meet with federal and state officials and stakeholder groups to discuss and resolve scientific issues;
- Design toxicology testing programs and testing strategies to support new and existing products;
- Support TSG management and staff in scientific and administrative matters.
- Clients include large producers and marketers of consumer products, chemicals and pesticides, as well as a number of small businesses, biotech firms, and trade associations.

### **ARCADIS**

**2000 to 2001**

*ARCADIS is an international company that provides consultancy, design, engineering and management services in the fields of Infrastructure, Water, Environment and Buildings. With more than 22,000 employees and more than \$3.3B in revenues the company has an extensive international network that is supported by strong local market positions.*

## Curriculum Vitae Beth E Milesen

### Principal Scientist

#### Responsibilities included:

- Develop toxicological and human health risk assessments for site-specific and chemical-specific scenarios,
- Develop and maintain client relationships,
- Mentor junior staff.

### **ILSI Risk Science Institute**

**1996 to 2000**

*The International Life Sciences Institute (ILSI) is a nonprofit, worldwide organization whose mission is to provide science that improves public health and well-being. It achieves this mission by fostering collaboration among experts from academia, government, and industry on conducting, gathering, summarizing, and disseminating science. Its activities focus primarily on nutrition and health promotion; food safety; risk assessment; and the environment.*

### Senior Scientist

#### Responsibilities included:

- Design and implement programs to advance the scientific basis of risk assessment;
- Create proposals outlining goals and objectives, strategic plans and budgets necessary to complete projects;
- Collaborate with scientists from U.S. and international agencies and organizations including the U.S. Environmental Protection Agency, Food and Drug Administration and Organization for Economic Cooperation and Development;
- Direct and chair working groups composed of scientists from academia, industry, government and public interest groups and stimulate them to reach consensus on difficult scientific issues.

#### Projects included:

1. Develop principles to determine what constitutes a common mechanism of toxicity;
2. Develop guidance for the design and interpretation of studies to characterize acetylcholinesterase activity in the peripheral nervous system;
3. Develop a framework for cumulative risk assessment; and
4. Evaluate experimental methods to identify and characterize developmental neurotoxicity.

### **NC Department of Environment & Natural Resources**

**1992 to 1996**

*The North Carolina Department of Environment and Natural Resources (DENR) Division of Air Quality (DAQ) works to protect and improve outdoor, or ambient, air quality in North Carolina for the health, benefit and economic well-being of all. To carry out this mission, the DAQ operates a statewide air quality monitoring network to measure the level of pollutants in the outdoor air, develops and implements plans to meet future air quality initiatives, assures compliance with air quality rules, and educates, informs and assists the public with regard to air quality issues.*

### Toxicologist

#### Responsibilities included:

- Design, conduct, and interpret large-scale ambient sampling studies used to characterize concentrations of toxic air pollutants and assess citizen exposure and risk,
- Direct the DENR Secretary's Scientific Advisory Board on Toxic Air Pollutants (SAB),
  - Work with scientists from research institutions, universities, government and industry;
  - Identify toxic air pollutants (TAPs) of concern to North Carolina;



## Curriculum Vitae Beth E Milesen

- Conduct risk assessments for TAPs based on primary literature.

### **Projects included:**

1. Design and direct large-scale ambient monitoring studies to measure TAPs emitted by petroleum terminals, wood furniture manufacturing facilities and polyurethane foam producing facilities;
2. Assess potential human exposure to emissions from hazardous waste-burning incinerators, phosphate mining operations, petroleum terminals and furniture manufacturing facilities based on measured ambient levels and modeled concentrations of TAPs;
3. Prepare risk assessments and derive acceptable ambient levels (AALs) for many toxicants, including, allyl chloride, toluene diisocyanate, methylene chloride and formaldehyde.

### **Duke University Medical Center**

**1989 to 1991**

*Duke University has about 13,000 undergraduate and graduate students and a world-class faculty helping to expand the frontiers of knowledge.*

### **Research Associate, Department of Pharmacology and the Center for the Study of Aging**

#### **Responsibilities included:**

- Design and conduct behavioral, neurochemical and neuropharmacologic studies to determine toxicologic mechanisms involved in selective neuronal degeneration that occurs following transient forebrain ischemia, an animal model of stroke;
- Supervise undergraduate and graduate students and technical staff.

#### **Projects included:**

1. Complete three comprehensive studies on neuronal degeneration,
2. Publish the results in the peer-reviewed literature;
3. Fulfill postdoctoral training in sociology, physiology, cardiology, and disease in aging populations.

### **University of North Carolina- Chapel Hill**

**1985 to 1989**

*The University of North Carolina at Chapel Hill prides itself as the nation's first public university, serving North Carolina, the United States and the world through teaching, research and public service.*

### **Doctoral candidate, Curriculum in Toxicology in the Medical School of UNC – Chapel Hill**

#### **Responsibilities included:**

- Conduct research in Dr. Richard Mailman's Neurotoxicology Laboratory on the effects of toxicants on brain dopamine neurotransmission in rats;
- Train and supervise laboratory technicians.

**George Washington University**

**1980 to 1984**

*The George Washington University is located in the nation's capital and is an institution with a history of dedication to educating and preparing future leaders.*

**Master's degree candidate, Department of Biological Sciences**

- Conduct research in Dr. Randall Packer's laboratory to determine how acid-base balance in tropical land crabs is affected by changing environmental temperature;
- Teach human and advanced human physiology to undergraduate students.

**Undergraduate Student Researcher, Department of Biological Sciences**

- Conduct undergraduate research in the laboratory of Dr. John Burns, to determine the seasonal variation in the reproductive biology of tropical poeciliid fish in the absence of significant seasonal changes in day-length.

**CERTIFICATIONS**

Diplomate of the American Board of Toxicology, 1996; recertified: 2001, 2006, 2011, 2016

**PROFESSIONAL MEMBERSHIPS**

Society for Risk Analysis  
Society for Neuroscience  
Society of Toxicology  
American Association for the Advancement of Science

**INVITED PARTICIPANT IN WORKING GROUPS/TASK FORCES**

- **Workshop:** Risk Assessment Methodologies Workshop on Approaches to Weight of the Evidence Evaluation in Risk Assessment, ILSI Health and Environmental Sciences Institute, December 2006.
- **Working Group:** Food Safety in Europe: Risk Assessment of Contaminants in Food, **European Union Concerted Action and ILSI Europe**, January-October 2000
- **Workshop:** Threshold of Toxicological Concern, **ILSI Europe**, October 1999
- **Workshop:** The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- **Working meeting** for development of Total Risk Integrated Model, **U.S. EPA**, June 1996
- **Workshop:** Mechanism-based Toxicology in Cancer Risk Assessment: Implications for Research, Regulation and Legislation, **National Toxicology Program**, January 1995
- **Working Group:** Board of Scientific Counselors Ad Hoc Working Group to review the Criteria for Listing Carcinogens, **National Toxicology Program**, April 1995
- Task Force on Risk-Based Protocol for Determination of Soil and Water Clean-up Levels, **NC Department of Environment and Natural Resources**, 1995-1996

## Curriculum Vitae Beth E Milesen

- Ad Hoc Committee for Air Quality Standards **ACGIH**, 1995
- Air Toxics Committee member, **State and Territorial Air Pollution Program Administrators (STAPPA) and Association of Local Air Pollution Control Officials (ALAPCO)**, 1994-1996

### INVITED PRESENTATIONS

- *Cumulative Risk Assessment of OP Pesticides in the Diet based on a Probabilistic Method for Exposure Assessment.* at the Asia-Wide Symposium on Risk Assessment of Contaminants in Food, Seoul, South Korea, **Korea Food and Drug Administration**, November 1999
- *A Framework for Cumulative Risk Assessment* at the workshop: The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- *A Comparison of Three Methods to Cumulate Risk Due to Exposure to Multiple Chemicals that Act by a Common Mechanism of Toxicity.* **American Crop Protection Association**, December 1998
- *Common Mechanism of Toxicity, Report of the ILSI RSI Working Group.* **EPA FIFRA Scientific Advisory Panel**, 1998
- *Common Mechanism of Toxicity: A Case Study of OP Pesticides* **EPA OPP Pesticide Program Dialogue Committee**, 1998
- *Procedures and Functions of the Secretary's Scientific Advisory Board on Toxic Air Pollutants.* **NC Legislative Committee on Air Quality** 1996
- *Monthly Briefing* Air Quality Committee of the **North Carolina Environmental Management Commission**, 1995-1996
- *Investigation of Bulk Gasoline Terminals at Paw Creek, Mecklenberg County, NC.* **NC Legislative Environmental Review Committee**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation*, **Press Conference**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation*, **Public Meeting**, February 1994
- *Reconciliation of the NC Regulations for Control of Toxic Air Pollutants with the Federal Clean Air Act of 1990.* **NC Aggregates Association**, May 1993 and **Guilford County LEPC Industry Forum Meeting**, May 1993

### ADDITIONAL PROFESSIONAL ACTIVITIES

- Partner with ILSI Europe on **A European Commission Concerted Action** on Risk Assessment of Chemicals in Food and Diet, April, 2000-February 2001
- Organized and chaired a symposium on Cumulative Risk Assessment at the **Society for Risk Analysis Annual Meeting**, December 1999
- Nominated as a potential member of the **EPA FIFRA Scientific Advisory Panel** (declined due to participation in ILSI activities germane to issues considered by the SAP) October, 1997
- Member of the Editorial Advisory Board, **Reviews in Toxicology**, **IOS Press** (2001).

**FULL LENGTH REFEREED PUBLICATIONS**

1. Milesen, B.E., Packer, R.K., 1986. Hemolymph acid base balance in the terrestrial crab, *Gecarcinus ruricola*, with changing environmental temperature. **Comp. Biochem. Physiol.** 85A:4;715719.
2. Milesen, B.E., Schwartz, R.D., 1991. The use of locomotor activity as a behavioral screen for neuronal damage following transient forebrain ischemia in gerbils. **Neuroscience Letters** 128; 71-76.
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12. Edler L, Poirier K, Dourson M, Kleiner J, **Milesen B**, Nordmann H, Renwick A, Slob W, Walton K, Wurtzen G. 2002. Mathematical modeling and quantitative methods. **Food Chem Toxicol.** 40(2-3):283-326.

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3. Milesen, B.E., 1996. Investigation of toxic air pollutants emitted by wood furniture manufacturing facilities in Caldwell County, North Carolina. **NC DEHNR Air Quality Investigation Report**
4. Milesen, B.E., 2001. Guest Perspective: EPA Pesticide Cumulative Risk Model Evolution Continues. **Risk Policy Report.** Volume 8 (10) 30-32.

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# **ATTACHMENT 2**



## Letters from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida

The attached 11 letters were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the sworn affidavits that were submitted by these researchers and citrus growers.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC -- 10/16/17**

(Also see the sworn affidavit from Dr. Philip Stansly, dated 5/21/18)

*"There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane."*

**2. Walter T. Jerkins, President, Premier Citrus LLC -- 10/11/17**

(Also see the sworn affidavit from Walter T. Jerkins, dated 5/23/18)

*"Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus."*

**3. John Gose, General Manager, Lykes Bros. Inc -- 10/2/17**

(Also see the sworn affidavit from John Gose, dated 5/17/18)

*"We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc -- 9/28/17**

(Also see the sworn affidavit from William Roe, dated 4/27/18)

*"As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant*

*and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product.”*

**5. Steve Ryan, President, Alico Citrus -- 10/10/17**

(Also see the sworn affidavit from Dave Owens, Director of Chemical Sales, Alico Citrus, dated 5/29/18)

*“As a fresh fruit packer we recognize Aldicarb’s extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product.”*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 10/11/17**

(Also see the sworn affidavit from Tim Dooley, dated 5/17/18)

*“Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!”*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC – 11/3/17**

(Also see the sworn affidavit from Marvin Kahn, dated 5/xx/18)

*“We have had experience using Aldicarb in the past and have witnessed firsthand its positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods.”*

**8. Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP – 10/20/17**

(Also see the sworn affidavit from Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP, dated 5/23/18)

*“I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers*

*who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials."*

**9. John Barden, Vice President, Barben Fruit Company Inc – 10/13/17**

(Also see the sworn affidavit from John Barden, dated 5/30/18)

*"Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid."*

**10. David Howard, Vice President Operations, Graves Brothers Company – 11/3/17**

*"Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control."*

**11. Keith Davis, Owner, Florida Fertilizer Company Inc -- 10/10/17**

*"Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements."*

Southwest Florida Research and Education Center  
2686 State Road 29 North  
Immokalee, FL 34142-9515

239-658-3400  
239-658-3469 Fax  
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To: Antoine A. Puech, Managing Member, AgLogic Chemical LLC  
From: Dr. Philip A. Stansly, [pstansly@ufl.edu](mailto:pstansly@ufl.edu)  
Cc: Ron Hamel, Gulf Citrus Growers Association  
Date: 16 October 2017  
Subject: Re-registration of aldicarb

Dear Sir,

By means of this memo I would like to express my full support for the re-registration of Aldicarb in citrus. I am a research and extension entomologist working on citrus at this Center since 1989. My appointment is state wide with emphasis of the southwest growing regions which comprises about 25% of total citrus production in the state. During this time I have had considerable experience working with aldicarb, both pre and post greening (HLB) as you can see from the citations below. In my estimation aldicarb is an excellent product both in terms of efficacy as well as environmental and personal safety, thanks to the safeguards and stewardship actually in place.

There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane. Therefore, I urge that no effort be spared in registering aldicarb again for citrus in Florida and elsewhere in the US wherever citrus is grown. Please feel free to contact me for any additional information with respect to this issue.

Best Regards,

Digitally signed by Phil Stansly  
DN: cn=Phil Stansly, o=UF-IFAS, ou=SWFREC,  
email=pstansly@ufl.edu, c=US  
Date: 2017.10.16 11:58:17 -04'00'

Philip A. Stansly  
Professor of Entomology

**References cited:**

Stansly, P. A., and R. E. Rouse. 1994. Pest and yield responses of citrus to Aldicarb in a flatwoods grove. *Proceedings of the Florida State Horticultural Society* 107: 69-72.

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P.O. BOX 690759  
Vero Beach, FL 32969

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 So Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech;

I am writing this letter with the intent to offer my full support as well as the full support of all of Premier's citrus related companies and clients in Florida for the re-registration of Aldicarb as a restricted use pesticide in Florida.

I currently serve as President of Premier Citrus and Premier Citrus Management, and together these companies have directly managed over 20,000 acres of citrus annually, in seven different Florida counties since 2005. Premier also operates one of the industry's largest fresh fruit packing houses, as well as one of the largest fresh citrus marketing companies. Prior to working with Premier, I managed the state's largest grove management company, Blue Goose Growers all the way back to 1980, including the Dole Citrus activities between 1983 and 2000.

My experience in crop management goes all the way back to 1975, but closer to 1980 when I first became actively involved and responsible for the selection and use of citrus pesticides. Since Aldicarb first became available in Florida, we used the product on practically all of our managed acres at the labeled rate due to the easiest of all metrics to track: higher earnings.

Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus.

Improved yields were most often a result of improved size, which always carries a premium in the fresh fruit business. That size improvement as well as overall blemish control was easily noticed in the packinghouse and drove more favorable size and quality packages, again driving up revenues for fresh fruit as well as juice fruit.

In fact, the product was so important to our annual production plan that actively participating in complying with the Stewardship program was a high company priority to insure

that by our safe use we could help the registrant keep the product available out into the future. It was a major disappointment when Bayer voluntarily pulled the label in 2010, and we believe strongly that its discontinued use and loss of the PGR and other effects coincided and contributed to both our company and the Florida industry yield decline as the additional pressure of ACP and HLB expanded and has contributed to this day.

Premier's current nucleus of excellent grove managers happen to be the remnants of one of the industry's largest Aldicarb applicators prior to 2010, and we have access to those same machines now. Together with those machines and experienced managers and applicators, Premier could be in the application business as quickly as anyone, as we have the weight of the grove financial base also pushing for this application capability.

The availability of Aldicarb will be a valuable offset to the nagging weak tree health that continues to suffocate our yields. HLB has the Florida industry on its heels, and with the last hurricane, it's fair to say we're desperate to obtain any tools that can even incrementally get us back to improved productivity and revenues to keep us in business.

Please keep up your best effort to obtain a registration by whatever means necessary, and consider Premier a strong supporter willing to help you at every turn.

Thank you for considering our need and our support of your pursuit of the use of Aldicarb for Florida citrus growers.

A handwritten signature in black ink, appearing to read "Walter T. Jerkins, Jr.", with a stylized flourish at the end.

Walter T. Jerkins, Jr.  
President, Premier Citrus, LLC  
625 66th Ave SW, 32968  
Vero Beach, Florida  
Ph: 772-469-1549, Mobile: 772-473-9754

# LYKES BROS. INC.

7 Lykes Road  
Lake Placid, FL 33852-9582



Telephone: (863) 465-4127  
FAX: (863) 465-2289

To: Antoine Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

October 2, 2017

Dear Mr. Puech,

My name is John Gose and I am the General Manager for Lykes Bros. Inc. Our company has been a major player in the citrus industry for many decades now. We have over 6,000 acres of active citrus land with various varieties of oranges for juice. We have been in a war against HLB for many years and time is running out for many growers. Just five short years ago we were at over 16,000 active citrus acres. The loss of over 10,000 acres is a direct result of citrus greening. The need is great to resurrect a product that will help us fight multiple pests as well as promote tree health and growth and increase fruit yields.

As a grower we used aldicarb in the past under the registered name of Temik. We are aware that aldicarb requires precise application and safety requirements and I can assure you we are prepared to follow the stringent program in our groves. The reinstatement of aldicarb in the citrus industry is crucial to our survival. We recently suffered major setback due to Hurricane Irma and that toppled with the constant pressure of Citrus Greening has many growers in a fight to stay in business. We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops.

John Gose,

A handwritten signature in black ink, appearing to read 'John Gose'.

General Manager



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Red Deer  
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Blue Lake  
Tru-Tone  
Tru-Type  
Blu-Knight

To: Antoine Puech  
Managing Member AgLogic Chemical LLC  
121 South Estates Drive, Suite 101  
Chapel Hill, NC 27514

From: Bill Roe  
VP Operations Wm. G Roe & Sons Inc.  
Winter Haven, FL 33882

Date: September 28, 2017  
Re: AgLogic 15GG Aldicarb pesticide

Dear Mr Puech:

I am writing this letter in support of the re-registration of Aldicarb as a restricted use pesticide for use on Florida citrus.

Our company Wm G Roe & Sons is a long standing player in the citrus industry in Florida. We own manage or operate approximately 3,000 acres of citrus across various locations throughout the citrus belt. We have a diversified portfolio of varieties which range from Pomelo to Tangerines and our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are the leading shipper of tangerines in the state of Florida and our brand Noble is highly respected in retail and terminal markets. We had used Aldicarb in the form of Temik for many years during the decades of the 80's, 90's, and 2,000's.

At one point during the 90's we were certified commercial applicators in addition to using it on all of our own acreage for which it could be permitted.

As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product.

We recognize that Aldicarb requires a stringent stewardship program to insure its safe and appropriate application. Florida had implemented a rigorous stewardship program through its Dept of Agriculture during the prior application period which required prior site inspections, well set-backs, and application permits specific to site. For many years this program was successfully administered and has a legacy of providing the industry with a proven tool to enhance tree vigor, yield and fruit quality.

As an industry besieged with disease and recent bad weather luck we sorely need this product for use in our groves to offset the deleterious impacts of Greening.

Sincerely,





October 10, 2017

Antoine Puech  
Managing Member  
Aglogic Chemical LLC  
121 S Estates Drive Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

My name is Steve Ryan and I am the President of Citrus Operations for Alico. Our company grows 32,000 acres of citrus throughout Florida. We currently have 250 full time employees as well as several hundred contract laborers.

We have been battling Huanglongbing, aka citrus greening, for several years and have seen our production decline rapidly as a direct result of this disease. One of our primary weapons against the vectors of this disease was Aldicarb which we used until it was taken off the market in 2010. Now is the time to resurrect this product as a much needed tool in our battle to stop the devastating ravages of this disease.

We at Alico understand that this product requires diligent stewardship activities and are committed to ensuring this product is used in a safe and responsible manner. Our company has experience in using millions of pounds of Aldicarb for over 20 years without incident.

The damage caused by Hurricane Irma has only exacerbated our need to have this product available to us as soon as possible. We appreciate the efforts of Aglogic in bringing this product back to the citrus industry. Alico is committed to assisting you however we can in obtaining regulatory approval. It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications.

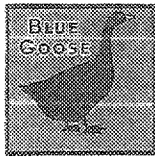
Thank you again for your efforts to get this product reinstated for the citrus industry. It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Ryan", is written over a circular stamp.

Steve Ryan  
President

12010 E Hwy 70  
Arcadia, FL 34266



**Blue  
Goose  
Growers**

**Florida Grove and Crop Management L.L.C**

P.O. Box 14709  
Ft Pierce, FL 34979  
Phone (772) 461-3020  
Fax (772) 468-4669

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S. Estates Dr., Suite 101  
Chapel Hill, NC 27514

**RE: Aldicarb (Temik) Re-Registration**

Dear Mr. Puech:

As General Manager of Blue Goose Growers, a 10,000 acre citrus management company, located on the east coast of Florida, I fully support your effort to re-register Temik for use on citrus in Florida.

As you are aware, our industry is suffering and in need of every available tool to control the spread of citrus greening and make this industry viable again. Allowing Temik to be used again on citrus in Florida will once again allow us to have a familiar product, a product that works, to control the pests that carry diseases that threaten our citrus crops.

Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!

We all genuinely appreciate your effort to expedite this re-registration effort, and look forward to having Temik available for use.

Sincerely Yours,



Timothy J. Dooley  
VP/GM, BGG

## Antoine Puech

---

**From:** Marvin Kahn <mkahn@kahngrove.com>  
**Sent:** Friday, November 03, 2017 3:52 PM  
**To:** Antoine Puech  
**Cc:** mikes@flicitrusmutual.com; Andrew Meadows; Trevor Murphy  
**Subject:** Aldicarb

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Good afternoon Mr. Puech,

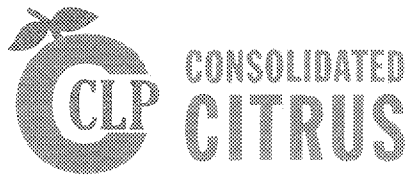
We are a third-generation citrus growing operation, with experience in the industry dating back to the 1930s when my father purchased his first orange grove. We have had experience using Aldicarb in the past and have witnessed firsthand it's positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods. Please let us know if there is anything we can do to assist you in this process.

If you have not heard from the five or so grower organizations CEO's , we or Mike Sparks and Andrew Meadows could help in this regard.

Regards,

Marvin Kahn  
Kahn Citrus Management, LLC  
Murphy Ag Solutions of the Heartland, LLC  
P.O. Box 3346  
Sebring, FL 33871  
863-381-0384 (Cell)  
863-385-6136 (Office)  
863-382-9737 (Fax)





10/20/2017

Michael Stewart, Manager  
Horticultural Services  
Consolidated Citrus LP  
63 Barn Rd.  
Venus, FL 33960

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

In my position as Manager – Horticultural Services for Consolidated Citrus LP, I am writing in support of AgLogic LLC's application to register AgLogic 15GG Aldicarb pesticide for use in citrus in the state of Florida. Consolidated Citrus has nearly 30,000 acres of citrus, making it one of the largest citrus production companies in Florida. I have used Aldicarb, as the branded product Temik, for many years under three different registrants, Union Carbide, Rhone Poulenc and Bayer Crop Science. I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials. If AgLogic 15GG Aldicarb is registered and priced right, Consolidated Citrus would very likely use it for both fresh and processed citrus fruit production. Thank you for your efforts to register this product.

Sincerely yours,

Michael Stewart, Manager  
Horticultural Services

63 Barn Road  
Venus, FL 33960

(p) 863-699-6090  
(f) 863-465-6837



October 13, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

Our company has been growing citrus in central Florida since the 1920's. The fifth generation has just joined us and expanded our farming operation to include blueberries. My two brothers and I manage the day to day farming activities personally meaning our boots are in the groves.

I am writing to support AgLogic Chemical LLC to pursue the registration for AgLogic 15GG Aldicarb for use in Florida citrus. For more than 20 years, Aldicarb (brand name Temik) was one of the most effective inputs to manage a broad range of citrus pests systemically in the tree. This resulted in substantial increases in fruit yields and quality as well as improved growth

The grower community is encouraged by your effort to get an Aldicarb product again registered in Florida citrus. Right now, growers are in the fight of their life against a disease known as HLB, or citrus greening. HLB is a vascular disease vectored by the Asian citrus psyllid (ACP). It is endemic to the state of Florida and it can kill a tree within two years. Our crop has shrunk by more than 66 percent since the onset of HLB.

No cure exists although a massive research effort over the past decade has made headway. Adding Aldicarb back to the toolbox will help slow the spread of the disease through an effective integrated management program. When Temik was registered in Florida citrus, growers followed an intensive stewardship program regulated at both the state and federal level. All application sites were monitored prior to the start of the approved application period. All wells at each site were identified, located, and flagged with a setback. The program clearly showed that Aldicarb can be used safely.

Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid.

Regards,

A handwritten signature in dark ink, appearing to read "John P. Barben".

John P. Barben  
VP, Robert J. Barben, Inc.  
VP, Barben Fruit Co., Inc.



November 3, 2017

Antoine A Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

I am writing this letter to offer my support, and the support of Graves Brothers Company, in the pursuit of re-registration of Aldicarb as a restricted use pesticide on Florida citrus.

Having been raised in Central Florida while working on family owned citrus properties, and as a graduate of The University of Florida Citrus Horticulture Program, I feel that my 30 years of citrus production experience qualifies me to encourage the return of Aldicarb (AgLogic 15GG) pesticide to the Florida Citrus Industry.

I currently manage the agricultural properties owned by Graves Brothers Company. GBC has been involved in Florida agriculture since the 1930's and currently owns and manages 9,000 acres of cattle, timber, vegetable, ornamental and citrus production in Florida. Over the last 70 years Graves Brothers Company has been heavily focused on all phases of the Florida Citrus Industry from nursery tree production through citrus harvesting, packing and sales.

We are struggling, as is the entire Florida Citrus Industry, with the bacterial disease Huanglongbing and its associated vector Asian Citrus Psyllid. The reduction in tree health brought on by this imported disease and its introduced vector has placed our entire industry on the precipice of collapse. Our industry is desperately in need of tools to combat this endemic disease.

Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control.

It is my understanding that Ag Logic 15GG will be labeled for application and use by the same Florida Rule (Rule 5E2.028) as in the past. The history of stewardship of Aldicarb by Florida Citrus Growers under these guidelines has proven that this product can be used safely and without any unacceptable environmental risk. The cadre of growers and applicators that were part of this successful history are more than capable of continuing this legacy in Florida citrus.

Please consider the needs of Graves Brothers Company and more specifically the needs of The Florida Citrus Industry as you endeavor to return this important tool to our diminished grower toolbox.

Sincerely,

David F Howard  
Vice President of Operations  
Graves Brothers Company  
2770 Indian River Boulevard, Suite 201  
Vero Beach, Florida  
Phone: 772.562.3886, Mobile: 772.473 9622

2770 Indian River Blvd; Suite 201, Vero Beach, Florida 32960-4230  
Phone (772) 562-3886 Fax (772) 562-3565  
[www://GravesBrothersCompany.com](http://www.GravesBrothersCompany.com)

ED\_002527\_00004560-00016

# FLORIDA FERTILIZER COMPANY, INC.

P.O. BOX 1087 • WAUCHULA, FL 33873-1087  
(863) 773-4159 • FAX # (863) 773-9363  
office@flfertilizer.com

October 10, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

My name is Keith Davis. I am a citrus grower, fertilizer and agricultural chemical supplier. I own approximately 175 acres of citrus, and make recommendations for many customers in the citrus industry.

I strongly support AgLogic efforts to register AgLogic 15GG for use on citrus in the state of Florida. As a citrus grower and chemical supplier, with almost 40 years of experience, I have seen firsthand what Aldicarb does for a citrus tree. Aldicarb makes it "Healthy"! Why? It reduces nematodes on the roots, and controls piercing and sucking insects. Aldicarb also increases pound solids of fruit, enables it to handle stress from cold weather, and should help trees survive and be able to withstand the effects of citrus greening (HLB) bacteria.

Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements.

AgLogic 15GG would be a great product to have for Florida citrus, to keep this great industry strong and viable.

Sincerely,



Keith Davis







Message

---

**From:** Guilaran, Yu-Ting [Guilaran.Yu-Ting@epa.gov]  
**Sent:** 8/10/2018 1:25:57 PM  
**To:** Beck, Nancy [Beck.Nancy@epa.gov]; Keigwin, Richard [Keigwin.Richard@epa.gov]  
**CC:** Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Baptist, Erik [Baptist.Erik@epa.gov]; Keller, Kaitlin [keller.kaitlin@epa.gov]; Messina, Edward [Messina.Edward@epa.gov]; Pease, Anita [Pease.Anita@epa.gov]  
**Subject:** RE: Temik/AgLogic  
**Attachments:** Aldicarb SLN 8-6-2018 revised after meeting with AgLogic\_clean.doc

Here it is...

Regards,

Yu-Ting Guilaran, P.E.  
Director

Pesticide Re-evaluation Division (PRD)  
Office of Pesticide Programs  
Office of Chemical Safety and Pollution Prevention  
(tel) 703 308 0052  
(fax) 703 308 8005  
Mail code 7508P  
Room number PY S9623

---

**From:** Beck, Nancy  
**Sent:** Friday, August 10, 2018 9:18 AM  
**To:** Keigwin, Richard <Keigwin.Richard@epa.gov>  
**Cc:** Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Keller, Kaitlin <keller.kaitlin@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Guilaran, Yu-Ting <Guilaran.Yu-Ting@epa.gov>; Pease, Anita <Pease.Anita@epa.gov>  
**Subject:** Re: Temik/AgLogic

Attachment did t come through. Thanks.

\*\*\*\*\*

Nancy B. Beck, Ph.D., DABT  
Deputy Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
P: 202-564-1273

**Personal Matters / Ex. 6**  
[beck.nancy@epa.gov](mailto:beck.nancy@epa.gov)

On Aug 10, 2018, at 9:12 AM, Keigwin, Richard <Keigwin.Richard@epa.gov> wrote:

## Deliberative Process / Ex. 5

Rick Keigwin  
Director, Office of Pesticide Programs  
U.S. Environmental Protection Agency  
Phone: 703-305-7090

Website: [www.epa.gov/pesticides](http://www.epa.gov/pesticides)

Sent from my iPhone

Begin forwarded message:

**From:** "Keigwin, Richard" <[Keigwin.Richard@epa.gov](mailto:Keigwin.Richard@epa.gov)>  
**To:** "Baptist, Erik" <[baptist.erik@epa.gov](mailto:baptist.erik@epa.gov)>, "Messina, Edward" <[Messina.Edward@epa.gov](mailto:Messina.Edward@epa.gov)>  
**Cc:** "Beck, Nancy" <[Beck.Nancy@epa.gov](mailto:Beck.Nancy@epa.gov)>, "Bertrand, Charlotte" <[Bertrand.Charlotte@epa.gov](mailto:Bertrand.Charlotte@epa.gov)>  
**Subject:** RE: OPP General Agenda Item; Temik

Message

---

**From:** Keigwin, Richard [Keigwin.Richard@epa.gov]  
**Sent:** 7/19/2018 4:49:57 PM  
**To:** Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Baptist, Erik [Baptist.Erik@epa.gov]  
**CC:** Keller, Kaitlin [keller.kaitlin@epa.gov]; Dinkins, Darlene [Dinkins.Darlene@epa.gov]; Messina, Edward [Messina.Edward@epa.gov]; Guilaran, Yu-Ting [Guilaran.Yu-Ting@epa.gov]; Goodis, Michael [Goodis.Michael@epa.gov]  
**Subject:** FW: AgLogic Florida SLN [IWOV-PaleyDocs.FID579377]  
**Attachments:** 3588985\_1.pdf; ATT1.pdf; ATT2.pdf; Response to Rathvon Letter re Aldicarb SLN for Florida Citrus -- July 2018.doc

Attached is our draft response to this letter. I should note that we are in the process of trying to schedule a meeting with Mr. Rathvon and his client, so we may want to hold off responding to the letter until after the meeting. OGC has reviewed the draft response.

---

**From:** Jim Rathvon [mailto:jrathvon@paleyrothman.com]  
**Sent:** Monday, July 02, 2018 2:20 PM  
**To:** Keigwin, Richard <Keigwin.Richard@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>  
**Cc:** Gebken, Richard <Gebken.Richard@epa.gov>; Maignan, Tawanda <Maignan.Tawanda@epa.gov>; Antoine Puech <antoinepuech@meycorp.com>; Cristen S. Rose <crose@paleyrothman.com>; 47788\_0001 \_ Aglogic Chemical \_ LLC Florida Citrus <{F579377}.PaleyDocs@NDM.paleyrothman.com>  
**Subject:** AgLogic Florida SLN [IWOV-PaleyDocs.FID579377]

Dear Mr. Keigwin and Ms. Beck: Attached is a letter on behalf of AgLogic Chemical LLC concerning an issue of great importance to Florida citrus growers and, indirectly, American consumers. Thank you in advance for your attention to this urgent matter.

Respectfully submitted,

Jim Rathvon  
Cristen Rose  
Counsel for AgLogic Chemical LLC

James P. Rathvon  
Attorney At Law  
Bio | Vcard

**PALEY  
ROTHMAN**

4800 Hampden Lane | 6th Floor | Bethesda, MD 20814 | 301-951-9342 | [www.paleyrothman.com](http://www.paleyrothman.com)

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ED\_002527\_00004574-00001

July 2, 2018

**BY ELECTRONIC AND OVERNIGHT MAIL**

Rick Keigwin, Director  
Office of Pesticide Programs  
USEPA Headquarters  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N. W.  
Washington, DC 20460-0001  
([keigwin.richard@epa.gov](mailto:keigwin.richard@epa.gov))

Nancy Beck, Deputy Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
USEPA Headquarters  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N. W.  
Washington, DC 20460-0001  
([beck.nancy@epa.gov](mailto:beck.nancy@epa.gov))

Re: Critically Important Pesticide SLN to Help Embattled Florida Citrus Industry

Dear Sir and Madame:

This letter requests your – and the Agency’s – support for a FIFRA Section 24(c) Special Local Need registration (SLN) for AgLogic 15GG, a granular insecticide containing 15% aldicarb, to control Asian citrus psyllid, citrus rust mites, spider mites, aphids and nematodes on Florida citrus. The SLN application was filed with the Florida Department of Agriculture and Consumer Services (FLDACS) on June 1, 2018 by AgLogic Chemical, LLC, the sole U.S. registrant of aldicarb.

The key facts are these:

1. The Florida citrus industry is on “the brink of annihilation” (Dr. Phillip Stansly, Professor of Entomology, U. Fl., 10/16/17 Letter). It has been ravaged by the citrus greening disease (HLB), transmitted by the Asian citrus psyllid (ACP), and there has been an **80% loss** in production of citrus statewide.<sup>1</sup>
2. Florida growers are losing the battle against the spread of citrus greening disease. At best, the current toolbox of chemical treatments only modestly retards the advance of the disease, but does nothing to improve production. As stated by one grower: “Absent better tools citrus growers will be out of business soon!” (Tim Dooley, Vice President and General Manager, Blue Goose Growers, LLC, 10/11/17 Letter). The intensive use of foliar treatments to fight psyllids has also resulted in other pest problems, including the development of resistance as well as spikes in mite, weevil, and aphid populations.

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<sup>1</sup>. At the time HLB was first discovered in 2003-2004, Florida orange production totaled 242 million boxes. In April 2018, the USDA National Agricultural Statistics Service estimated that just 45 million boxes of oranges would be harvested in 2017-2018 – a decrease of 197 million boxes, or 81%. USDA/NASS, Citrus April Forecast 2017-2018 Season (April 10, 2018) *available at*: [https://www.nass.usda.gov/Statistics\\_by\\_State/Florida/Publications/Citrus/Citrus\\_Forecast/2017-18/cit0418.pdf](https://www.nass.usda.gov/Statistics_by_State/Florida/Publications/Citrus/Citrus_Forecast/2017-18/cit0418.pdf).

3. ***The Florida citrus industry – including the largest growers in the state – enthusiastically support an SLN registration for AgLogic 15GG.*** Indeed, several prominent growers have taken the unusual step of submitting both signed affidavits (Attachment 1) and letters (Attachment 2) detailing why they so urgently need aldicarb.<sup>2</sup> As they explain, a unique attribute of aldicarb is that it stimulates tree health and root growth and ***markedly increases fruit size and yield***, precisely what growers need now to stay in business. Aldicarb is also effective against many pests, including psyllids, mites and nematodes, among others. As one grower has testified: “Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.” (John Gose, General Manager, Lykes Bros. Inc.; 5/17/18 Affidavit).
4. Florida citrus growers are familiar with aldicarb because they used the product (under the trade name, TEMIK 15G) with great results for several decades (~1978-2010), until Bayer, the sole registrant, *voluntarily* cancelled the registration and withdrew from the market, pursuant to a well-publicized corporate decision to exit all WHO Class 1 products.
5. FLDACS has advised AgLogic that it will not approve the SLN unless it is assured that EPA will not disapprove it. It is our understanding that EPA has not yet had the opportunity to review the SLN, attached affidavits and other materials demonstrating the Special Local Need for aldicarb. However, we also understand that there have been early indications by staff members in EPA’s OPP that OPP is inclined to ***deny*** the SLN.

We submit that OPP’s current disinclination to approve the SLN is unjustified and contrary to the public interest. The following points may clarify why we believe this:

6. At the time Bayer cancelled its aldicarb registrations, EPA was concerned about possible dietary risks to infants and children from consumption of food and drinking water containing aldicarb residues. For this reason, AgLogic’s subsequently-obtained registration for AgLogic 15GG, which is approved for use on cotton, peanuts and certain other crops, did not include use on citrus.
7. Over the past several years, aldicarb has undergone Registration Review. During this process, AgLogic implemented significant changes to the product label that result in aggregate dietary exposures to aldicarb well below the 2010 EPA Level of Concern. EPA has recently issued an Interim Registration Review Decision concluding that aldicarb may continue to be registered.
8. To assist the Agency in its assessment of aldicarb, including for use on citrus under a Florida SLN, AgLogic commissioned Dr. Beth Mileson, Principal Scientific Consultant, TSG Consulting, to conduct an acute dietary exposure and risk assessment for aldicarb.

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<sup>2</sup> For convenience, each attachment also includes a cover sheet highlighting relevant excerpts from the affidavits and letters, respectively.

This risk assessment was submitted to EPA earlier this year. Dr. Milesen's affidavit (included in Attachment 1) affirms that she conducted the risk assessment using models and methods identical to those used by EPA's risk assessors. The risk assessment demonstrates that 20% of the US citrus crop may be treated with aldicarb and dietary exposures (including food and water) for all sub-populations are well below any level of concern.

In short, there is no scientific basis for EPA to disapprove the SLN due to dietary risk.

\* \* \*

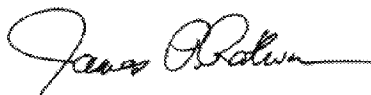
In summary, this SLN is critically important to a Florida citrus industry that desperately needs help. We urge you to take the steps necessary to ensure that OPP makes a full and fair assessment of the SLN, including its substantial benefits to American growers and consumers.

Time is of the essence. Application of AgLogic 15GG must occur during the dry season, which runs from mid-November through April at the latest. Even after the SLN is approved, several additional steps must be taken before applications can occur. Most important, AgLogic must identify applicators that have (or are willing to purchase) the necessary application equipment, and these applicators must be trained to ensure compliance with AgLogic's product stewardship program. Applicators must also petition FLDACS for permission to apply the product. Aldicarb has not been used on citrus since 2011, so considerable lead time is required to restart applications.

In furtherance of the process, AgLogic requests the opportunity to meet with the Agency as soon as possible to discuss the SLN and respond to any questions or concerns OPP may have. Depending on schedule, it is likely that one or more citrus growers and FLDACS officials will attend the meeting as well.

Thank you in advance for your attention to this important matter. Please do not hesitate to contact us if you have any questions or would like to discuss these issues further.

Sincerely,



James P. Rathvon  
Cristen S. Rose  
Counsel for AgLogic Chemical, LLC

Attachments

cc (by email and overnight mail):  
Richard Gebken, OPP  
Tawanda Maignan, OPP  
Antoine Puech, President/CEO of AgLogic



# **ATTACHMENT 1**

## **Affidavits from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida**

The attached 10 sworn affidavits were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the letters of support that were submitted by these researchers and citrus growers in late 2017.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC – 5/21/18**  
(Also see letter of support from Dr. Philip Stansly, dated 10/16/17)

*Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”*

*One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.*

*Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.*

**2. Walter T. Jerkins, President, Premier Citrus LLC – 5/23/18.**  
(Also see letter of support from Walter T. Jerkins, dated 10/11/17)

*Aldicarb is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.*

*Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.*

*The yield response from the use of aldicarb is robust, resulting in a sustained yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.*

*The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity - precisely the effects that are so desperately needed now by the citrus industry.*

**3. John Gose, General Manager, Lykes Bros. Inc – 5/17/18**  
(Also see letter of support from John Gose, dated 10/2/17)

*Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.*

*A serious drawback of foliar insecticides is that they can wipe out pollinators and other "beneficials" (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.*

*In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly higher pounds of solids per box, producing a very positive net economic return.*

*The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc – 4/27/18**  
(Also see letter of support from William Roe, dated 9/28/17)

*Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest*

*management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.*

*This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both - suppress psyllids and protect beneficials during bloom time - because of its systemic mode of action.*

*Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.*

**5. Dave Owens, Director of Chemical Sales, Alico Citrus -- 5/29/18**

(Also see letter of support from Steve Ryan, President, Alico Citrus, dated 10/10/17)

*Alicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides*

*The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.*

*Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 5/17/18**  
(Also see letter of support from Tim Dooley, dated 10/11/17)

*Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.*

*In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.*

*In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC -- 5/xx/18**  
(Also see letter of support from Marvin Kahn, dated 11/3/17)

*Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better - and are healthier - than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.*

*Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.*

*Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.*

**8. Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP -- 5/23/18**  
(Also see letter of support from Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP, dated 10/20/17)

*When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.*

*The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.*

**9. John Barden, Vice President, Barben Fruit Company Inc – 5/30/18**

(Also see letter of support from John Barden, dated 10/13/17)

*The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ACP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.*

*A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.*

*We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficial when we used aldicarb.*

**10. Dr. Beth Milesen, Principal Scientific Consultant, TSG Consulting – 5/24/18**

*The modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure. Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.*

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF PHILIP A. STANSKY, Ph.D.**

I, Philip A. Stansky, do solemnly swear as follows:

1. I am Professor of Entomology at the University of Florida (UF), Southwest Florida Research and Education Center, 2686 State Road 29 North, Immokalee, FL 34142. I joined UF in 1986, and moved to the Immokalee location in 1989.

2. I hold a Ph.D. in Entomology from Texas A&M (1985), an M.S. in Zoology from the University of Oklahoma (1978), and a B.S. in Zoology from Wayne State University (1967).

3. I am a research and extension entomologist focused on the integrated management of pests affecting major crops grown in southwest Florida, with emphasis on citrus and vegetables. I am the lead author or co-author of more than 538 scientific publications and 158 extension publications in my field, including 172 peer-reviewed articles. I am also the editor of a book and author of 9 book chapters relating to pest management.

4. I develop and test integrated systems of economic and sustainable pest management and their component tactics. I consult with members of the agricultural community, and provide information, training and diagnostic services in collaboration with county and multi-county agents.

5. A key focus of my work for the last 13 years has been and remains the citrus greening disease or huanglongbing (HLB), transmitted by the Asian citrus psyllid (ACP)

*Diaphorina citri*. My work is multifaceted and has included research on the use of aldicarb to control ACP and other citrus pests and to improve citrus yields.

6. Aldicarb (brand name, Temik) was registered for use on citrus in Florida for nearly 30 years until Bayer voluntarily cancelled all of its aldicarb registrations and exited the business at the end of 2010. Subsequently, AgLogic Chemicals, LLC obtained an EPA registration for an aldicarb product similar to Temik, called, AgLogic 15G, labeled for use on several crops not including citrus. AgLogic 15 G was subsequently approved in 2017 for use in Florida on peanuts and cotton by the Florida Department of Agriculture and Consumer Services.

7. I am aware that, at the request of numerous citrus producers, AgLogic Chemicals LLC applied to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG for use on citrus in Florida.

8. In a letter dated October 16, 2017 (attached), I expressed support for this SLN registration in the strongest possible terms. As stated in my letter: “It may not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida’s iconic citrus industry.” Accordingly, I urged that “no effort be spared in registering aldicarb again for citrus in Florida.”

9. I write this Affidavit to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida today.

10. Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”

11. Aldicarb is applied to the soil where it is absorbed by the tree roots and works systemically. As a result, aldicarb provides continuous pest control over an extended period of time, on the order of 90-120 days. At the same time, aldicarb is known to increase root growth, which promotes greater tree health and can lead to larger and more abundant fruit. Our research



cited below from a large scale replicated experiment in a commercial orange grove confirmed increased yield from trees treated with aldicarb. Stansly, P. A., and R. E. Rouse. 1994.

Pest and yield responses of citrus to aldicarb in a flatwoods grove. Proceedings of the Florida State Horticultural Society 107: 69-72.

12. Aldicarb applied through granular applicators below the soil surface has well established integrated pest management and environmental advantages over pesticides that are repeatedly applied through foliar sprays. AgLogic 15 G aldicarb is directly applied into the soil where it is absorbed by the roots, and works systemically against a broad range of pests. As a result, it does not have the same adverse impact as many foliar insecticide sprays on pollinators and other “beneficials” (*e.g.*, wasps, lady beetles, lace wings, and spiders) – which are key to effective integrated pest management programs. The safeguards and stewardship programs that have been adopted over the years for aldicarb provide additional assurance that aldicarb can be used on citrus safely and effectively without harming human health or the environment.

13. The insecticides currently available to citrus growers are, for the most part, applied by ground or aerial spray which may be repeated every 3-4 weeks. Rain events – which are not infrequent during the growing season in Florida – can rapidly wash away these residues, further reducing efficacy. In contrast, once aldicarb is absorbed by the tree roots it will remain active for several months.

14. One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.

15. Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.

16. Another problem faced by citrus growers today is citrus canker. To control canker, growers typically apply a copper-based fungicides at regular intervals. Unfortunately, copper inhibits beneficial mites that control rust mites. As a result, rust mites are a significant problem in many citrus groves where copper has been applied to combat canker. Again, aldicarb is highly effective in providing residual control of rust mites reducing the need for additional sprays.

17. As I noted in my support letter, Florida's iconic citrus industry is in a life or death struggle with HLB for survival. Growers face a host of pest problems, most importantly ACP/HLB, but also rust mites, canker, nematodes, aphids, and others. Hurricane Irma has only exacerbated the difficulties growers now face. In these dire circumstances, growers need more and better management tools, particularly in the face of growing ACP resistance to the neonicotinoids. Aldicarb – a carbamate with a different mode of action– has a proven track record with the Florida citrus industry by providing broad control of psyllids and other important pests while enhancing root growth and fruit production. For all these reasons, I urge the Department to approve an SLN registration for AgLogic 15GG.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on 21 May 2018.

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Philip A. Stansly, Ph.D.

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF WALTER T. JERKINS, JR.**

I, Walter T. Jerkins, Jr., do solemnly swear as follows:

1. I am the President of Premier Citrus and Premier Citrus Management, 635 66<sup>th</sup> Ave. SW, Vero Beach, FL, 32968.

2. Premier is among the largest citrus producers in Florida, managing over 20,000 acres of citrus groves, located in seven (7) counties in Florida. Premier's fresh fruit package house also is one of the largest in Florida.

3. I have more than 40 years of experience in the citrus industry. After graduating from the University of Florida with a major in agriculture in 1975, I worked for about four (4) years at Southern Fruit Distributors, a Florida grower/processor. In 1980, I joined Blue Goose Growers, one of the state's largest grove management company, where I worked for more than 32 years. In 2013, I joined Premier as its President.

4. I am a founding member of Citrus Research and Development Foundation, Inc. (CRDF) and was its first President, a position I held for nine years (2011-Jan. 2018). The CRDF is headed by a 13-member Board of Directors that includes individuals from industry, academia, and government. The CRDF raises money and issues research grants to help companies develop products to combat citrus greening disease (HLB). Through my involvement in CRDF and knowledge of its research, I am well informed about the pest control products currently available

to the citrus industry and products still in the development pipeline. Aldicar is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.

5. I am not aware of any other single product or combination of products that provides the same yield improvement potential to the industry that aldicarb could provide, as discussed below.

6. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.

7. Premier enthusiastically supports AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 11, 2011 (attached), I affirmed Premier's strong support for this SLN registration.

8. The purpose of this Affidavit is to provide further explanation why aldicarb is urgently needed by citrus growers.

9. I have many decades of experience with the use of aldicarb on citrus. During the three decades that I was with Blue Goose Growers, we regularly used aldicarb (Temik) in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently had very positive experiences with aldicarb, which we regarded as a key tool in our arsenal to control insect pests and promote tree growth and fruit production. Year after year we found that when we used aldicarb, trees were healthier and more productive.

10. Premier also used aldicarb very regularly on virtually all of its citrus acres during the many years it was available. Based on my surveying of our grove managers here, Premier's positive experiences with aldicarb were very similar to those of Blue Goose Growers.

11. I have had discussions about aldicarb with many other growers in the industry over the years, including while I was CRDF President. The nearly universal consensus among citrus

producers is that aldicarb is a uniquely valuable product that offers a combination of benefits not provided by any other product or combination of products.

12. Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.

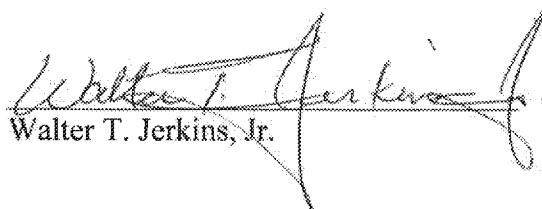
13. The yield response from the use of aldicarb is robust, resulting in a *sustained* yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.

14. The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity – precisely the effects that are so desperately needed now by the citrus industry.

15. For all these reasons, Premier urges the Department in the strongest possible terms to approve AgLogic’s application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.

  
Walter T. Jerkins, Jr.

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF JOHN GOSE**

I, John Gose, do solemnly swear as follows:

1. I am General Manager for Lykes Bros, Inc., 7 Lykes Road, Lake Placid, FL, 33852.
2. Lykes Bros a long-time major player in the Florida citrus industry. We have over 6,000 acres of active citrus groves. Over the last five years we have lost 50% of our citrus acreage due to Citrus Greening.
3. I have more than 40 years of experience in the citrus industry. My family owned citrus groves and I worked in those groves as a teenager. After I graduated from the University of Florida with a degree in agriculture/fruit crops in 1981, I accepted a position at Lykes Bros. I have worked at Lykes Bros in citrus management my entire career.
4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
5. We at Lykes Bros enthusiastically support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 2, 2011 (attached), I affirmed Lykes Bros' strong support for this SLN registration. As stated in my letter: "aldicarb ... is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."

6. The purpose of this Affidavit is to provide further explanation why citrus growers need aldicarb back in their toolbox.

7. Lykes Bros regularly used aldicarb (Temik) in citrus groves we managed for more than two decades, until it was voluntarily withdrawn from the market by Bayer in 2010. We consistently had very positive experiences with aldicarb. Based on our experiences, we consider aldicarb a uniquely valuable product that offers a combination of benefits not provided by any other registered product or combination of products.

8. Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.

9. A serious drawback of foliar insecticides is that they can wipe out pollinators and other “beneficials” (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.

10. In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly *higher pounds of solids per box*, producing a very positive net economic return.

11. The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root

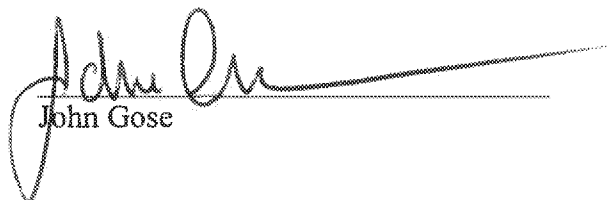
system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.

12. Another serious pest problem associated with citrus production in our groves is root weevils. Citrus greening disease interferes with the transport of sugars and other nutrients from the leaf canopy to the roots through the phloem. To compensate for this, we add nutrients to the soil to help feed the root system. Doing this, however, also supports root weevils (and nematodes). It is not an overstatement to say that root weevils are now a huge problem for Lykes Bros. Aldicarb is needed to combat this problem. When we were able to use aldicarb, we had few problems with root weevils. Root weevil larvae need moisture to come up from the soil and start feeding on the roots. When it was available, we applied aldicarb to soil in November and December. This application timing was perfect for knocking out root weevils before the next fruiting season.

13. For all these reasons, Lykes Bros urges the Department in the strongest possible terms to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 17, 2018.

  
John Gose



**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**AFFIDAVIT OF WILLIAM G. ROE II**

I, William (Bill) G. Roe II, do solemnly swear as follows:

1. I am Vice President and Chief Operating Officer for Wm. G. Roe & Sons, Inc. My family has worked in the citrus industry for nearly a century. Wm. G. Roe & Sons, Inc., founded by my grandfather in 1927, is a long-standing player in the Florida citrus industry. We own, manage, or operate approximately 3,000 acres of citrus in various locations across the citrus belt. Our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are perennially one of the top 10 packers in the state. We are also the leading shipper of tangerines in Florida and our brand, Noble, is highly respected in the markets. We have the only private citrus plant breeding program in Florida, which specializes in tangerines.

2. I have more than 40 years of experience in the citrus industry. After graduating from Vanderbilt University in 1975, and taking courses in citriculture at Lake Alfred Citrus Research Station, FL, I began working full-time at Wm G. Roe & Sons in 1976. Prior to that, I worked part-time as a tractor driver and mechanic at the company, starting when I was in high school. I have held several positions at the company, from grove area manager to eventually production manager, a position I held for nearly 20 years. I also worked as our packing house manager for 10 years.

3. I served as President of the Florida Citrus Managers Association from 1986-87, and after appointment to the Florida State PRC, was its Chairman in 1996.

4. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. As stated in my letter dated September 28, 2017 (attached), Wm. G. Roe & Sons strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.

6. Today in Florida we have the benefit of a host of new insecticide chemistries for topical application through spraying. At the same time, Florida has been beset with the citrus greening disease (HLB,) which has manifested itself in a most virulent fashion. Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.

7. This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are

prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both – suppress psyllids and protect beneficials during bloom time – because of its systemic mode of action.

8. While the discussion in the previous paragraph focuses on psyllids, the same point applies to the various members of the scale family, mealybugs, and to some degree leaf miners. Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.

9. A phenomena of the past 12 years since citrus Canker has become endemic in the state has been the necessity of spraying copper every 21 days to control Canker lesions on the peel of many varieties. Canker lesions allow secondary infections to occur in the wounds of the fruit's peel, eventually causing the fruit to drop from the tree, so its control is mandatory for commercial growers. Although we have Streptomycin permitted for topical application and which helps, its application does not allow reduced applications of copper during the growing season. On the down side, application of copper creates a favorable micro-climate for mites to harbor on the peel of the fruit, making them quite difficult to control. When the fruit is quite susceptible during the late spring to Canker, the weather is generally hot and dry, which is perfectly suited for mite build-up even without copper deposits on the surface of the leaves and fruit. Aldicarb provides excellent mite control for an extended period during the spring, is not intrusive to either beneficials or honeybees, and accordingly was one of the reasons why most of the fresh fruit industry used aldicarb when it was available.

10. Another important reason why aldicarb is need by citrus growers today is that it promotes tree health and fruit production – what growers have called a PGR (plant growth regulatory) effect. It is hard to quantitatively assess aldicarb's PGR effect for citrus, but its use causes fruit to have enhanced high peel color and both measurably larger and more uniform size. It could be the combination of aldicarb negating the feeding and sucking of plant bugs and its impact on reducing the nematode population simultaneously, but in any case it is the only chemistry I have used in my 42 years in the industry which enhances the tree's performance and which unquestionably enhances the value of the fruit produced.

11. As growers, we are constantly trying to compensate for the much diminished root system caused by HLB by providing additional fertilizer and nutritional elements. Correspondingly, we are having to apply more foliar copper and leaf nutrients which are exacerbating mite populations. Aldicarb would be a most useful tool for the grower community and the environment by virtue of its providing enhanced control of a broad range of pests while enabling the grower to reduce topical pesticides.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April, 27 2018.

  
William (Bill) G. Roe II

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**AFFIDAVIT OF DAVID OWENS**

I, David Owens, do solemnly swear as follows:

1. I am the Director of Chemical Sales for Alico Citrus, 12010 Hwy 70, Arcadia, FL, 34266. I have held this position since the end of 2015. My responsibilities at Alico include purchasing from, and liaising with, suppliers of pesticides, fertilizers, and other chemical products for use in citrus.

2. Alico, based in Fort Myers, FL, is among the largest citrus growers in the United States, with some 32,000 acres of citrus groves. In 2017, Alico was the country's largest citrus producer, producing 7.6 million boxes of fruit.

3. Prior to joining Alico, I worked in sales for Rhone Poulenc, and its corporate successors, Aventis and Bayer, for more than 20 years. During this time, I was responsible for the largest sales territory in Florida for the product, Temik, containing aldicarb. My work included talking with growers, interfacing with extension service scientists, and dealing with issues relating to registration, product application, stewardship and other matters. Overall, I have more than 35 years of experience with the citrus industry.

4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. We at Alico strongly support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 10, 2017 from Steve Ryan, President of Citrus Operations (attached), Alico affirmed its support for an SLN registration for aldicarb for citrus. As stated in that letter: "It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications. .... It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated."

6. I and Alico stand by these statements in the October 10, 2017 letter. The purpose of this Affidavit is to explain further why aldicarb is urgently needed by citrus growers, as it fills a need not met by any other product, or combination of products, currently available.

7. Alico has a long, positive history with aldicarb. Alico regularly used aldicarb (Temik) in its citrus groves for at least 20 years, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. Alico's very favorable experiences with aldicarb that spanned decades are the foundation for its strong support for an SLN registration for aldicarb.

8. Aldicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree

growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides.

9. No other product on the market has the same positive effects on tree health and fruit production that Alico – and many other citrus growers – have obtained with the use of aldicarb. During the years Alico used Temik/aldicarb, it realized a very favorable return on its investment in the use of the product year after year.

10. The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.

11. Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.

12. Although there are other products that are labeled for psyllid control, Alico has found that the efficacy of these products for psyllid control has plateaued in recent years. There is great concern at Alico and in the industry that resistance to these chemistries, particularly “neonics” such as imidacloprid, is growing. This is another reason why aldicarb is urgently needed at this time. Aldicarb, a carbamate class pesticide, provides a different mode of action and its use would greatly assist in managing psyllid resistance.

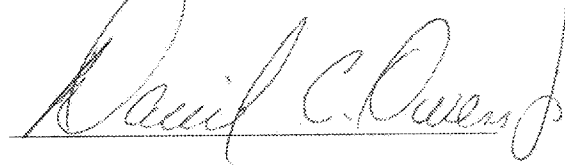
13. Aldicarb also provides well established environmental benefits. Because it is injected into the soil, it poses far less risk of harm to pollinators and other non-target beneficial insects than alternatives that are applied by foliar spray. The ability to use aldicarb would materially reduce the number of foliar applications of pesticides needed to control early season psyllids, and rust mites, greatly reducing the potential adverse impacts of harsher sprays on

beneficials and the environment. Aldicarb also has a much longer residual effect because it is distributed under the soil, and works best in wet soil. In contrast, foliar applications wash out in Florida's frequent rains and have to be repeated more often. It is fair to say that aldicarb is unique when it comes to controlling pests, while also increasing tree vigor and yields. There are also well established benefits of aldicarb on young trees. Aldicarb gives increased root flushes, and promotes the growth of young non-bearing and bearing trees.

14. For all these reasons, I urge the Department to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 29, 2018.

A handwritten signature in dark ink, appearing to read "David C. Owens", written over a horizontal line.

David Owens



**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF TIMOTHY J. DOOLEY**

I, Timothy J. Dooley, do solemnly swear as follows:

1. I am the Vice President and General Manager of Blue Goose Growers, a citrus grove and crop management company based in Ft. Pierce, Florida. I have worked for Blue Goose Growers for approximately 27 years.
2. Blue Goose Growers manages approximately 10,000 acres of citrus trees.
3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
4. As stated in my letter dated October 11, 2017 (attached), Blue Goose Growers strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.
5. Citrus growers in Florida, including groves under Blue Goose Growers' management, have a long history of using aldicarb (Temik) successfully to control pests and threaten Florida's citrus crops.

6. Since aldicarb was removed from the market, the health of the Florida citrus industry has declined immensely. HLB is ravaging the industry, and growers are suffering from declining tree health and decreased fruit size and yield.

7. Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.

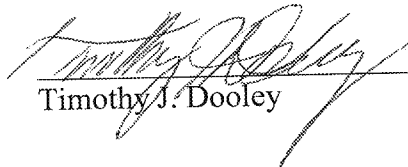
8. In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.

9. In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often.

10. There is no product or combination of products available to citrus growers today that offers the benefits of aldicarb. In addition to the longer residual control it provides, it is critically needed because it controls a wide range of pests, enhances tree health, and increases fruit production.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May, 17, 2018.

  
Timothy J. Dooley

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF \_\_\_\_\_) )  
Application of AgLogic Chemicals, LLC \_\_\_\_\_) )  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_) )  
Registration for \_\_\_\_\_) )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_) )  
\_\_\_\_\_)

**AFFIDAVIT OF MARVIN KAHN**

I, Marvin Kahn, do solemnly swear as follows:

1. I am the primary owner of Kahn Citrus Management (KCM), based in Sebring, FL. KCM manages thousands of acres of citrus in Polk, Highlands, Hardee and DeSoto counties, FL.
2. My father entered the citrus industry when he purchased his first orange grove in the 1930s. I have been a part of the citrus industry my entire working life, and have more than 60 years of experience in citrus management. (I just celebrated my 85<sup>th</sup> birthday.)
3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
4. As stated in my letter dated November 3, 2017 (attached), we at KCM fully support AgLogic's SLN application. Our support for this SLN registration is based on decades of favorable experiences that we have had with aldicarb (Temik), up until the end of 2010, when it was voluntarily withdrawn from the market by Bayer.
5. The purpose of this Affidavit is to explain further why aldicarb is so urgently needed by KCM and other citrus growers in Florida.
6. Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including

nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better – and are healthier – than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.


7. Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.

8. Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.

9. In summary, if aldicarb were available, growers would be able to control psyllids, rust mites, and other pests with fewer foliar sprays involving harsher chemistries. Overall, trees would be healthier and more productive, and there would be less damage to honeybees and other beneficials.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April \_\_, 2018.

  
\_\_\_\_\_  
Marvin Kahn

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF CODY LASTINGER**

I, Cody Lastinger, do solemnly swear as follows:

1. I hold the position of Manager – Horticultural Services for Consolidated Citrus, LP (“Consolidated”), 63 Barn Road, Venus, FL 33960. Consolidated is among the largest citrus producers in the United States, with some 30,000 acres of citrus groves.

2. I graduated from the University of Florida in 2013 with a Master’s in Agronomy and Weed Science. I received a second Master’s in Aquatic Plant Management from the University of Florida Gainesville in 2017. I became Manager – Horticultural Services at Consolidated very recently, after the former long-time Manager, Michael J. Stewart, recently retired.

3. I am aware that AgLogic is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG aldicarb pesticide for use on citrus in Florida.

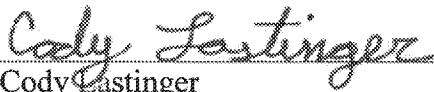
4. In a letter dated October 20, 2017 (attached), former manager Michael Stewart expressed Consolidated’s strong support for this SLN registration. This support is based on Consolidated’s many decades of favorable experiences with aldicarb (brand name, Temik), up through 2010, when it was voluntarily cancelled by Bayer. As stated in our October 20, 2017 letter: “When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective

pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.”

5. The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 23, 2018.

  
Cody Lastinger

BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES

)  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FLRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
)

**AFFIDAVIT OF ROBERT H. BARBEN AND JOHN P. BARBEN**

We, Robert H. Barben and John P. Barben, do solemnly swear as follows:

1. I, Robert H. Barben, am President and I, John P. Barben, am Vice President, of Robert J. Barben, Inc., 21 East Pine Street, Avon Park, FL 33825. Robert J. Barben, Inc. is a family business that traces its origins back to the 1920s. We have been in the business of growing and managing citrus for many decades. We currently manage about 1800 acres of citrus located in four counties in Florida.

2. We are aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

3. We at Robert J. Barben, Inc. strongly support AgLogic's SLN application for the use of aldicarb on citrus. In a letter dated October 13, 2017 (attached), we affirmed our unqualified support for this SLN registration.

4. The purpose of this Affidavit is to provide further explanation as to why aldicarb is urgently needed by Florida citrus growers today.

5. Our company has extensive experience with the use of aldicarb on citrus. During the 2-3 decades that aldicarb (brand name, Temik) was available to us, we used it regularly in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently saw very positive results with aldicarb. We found that when we used aldicarb, trees were healthier and more productive.

6. The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them.

7. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ASP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.

8. A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.

9. We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficials when we used aldicarb. Aldicarb is applied to the soil, not topically, and works systemically, so there is far less direct

exposure to beneficials with aldicarb.

10. The addition of aldicarb, which is a carbamate with a different mode of action, would be very helpful to citrus growers in managing pesticide resistance.

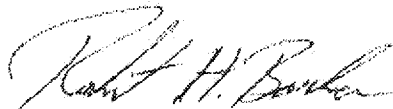
11. If aldicarb were available, we would apply it to the soil in winter months. This would enable us to reduce the number of foliar sprays by at least 2-3 during the spring months, which would reduce adverse impacts on beneficials.

12. Another reason why we urgently need aldicarb back is that it aldicarb increases root growth and fruit production. In our experience, using aldicarb is like giving the tree a steroid; the trees are healthier and there is a very definite growth response. Even more important economically, aldicarb increases the *pounds solids* produced by the tree. No other product compares to aldicarb in stimulating tree growth and fruit production.

13. In summary, aldicarb offers a unique combination of benefits not offered by any other single registered product or combination of registered products. These benefits include broad, long-lasting control of rust mites, minimal impacts on beneficials, and increased tree health and fruit production. These benefits are urgently needed by citrus growers now, more than ever. For these reasons, Robert J. Barben, Inc. urges the Department to approve an SLN registration for AgLogic 15 GG.

We declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.



Robert H. Barben



John P. Barben



**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF BETH E. MILESON, PH.D.**

I, Beth E. Milesen, do solemnly swear as follows:

1. I hold the position of Principal Scientific Consultant, Team Leader, Toxicology at Technology Sciences Group, Inc. (TSG), based in TSG's office at 1101 17<sup>th</sup> Street, N.W., Suite 500, Washington, D.C., 20036. I have worked at TSG since 2001,
2. TSG is a part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG).
3. A copy of my Curriculum Vitae is attached. As reflected therein, I received a Ph.D. in Toxicology from the University of North Carolina in Chapel Hill in 1989. I also hold a Bachelor of Science in Biology/Zoology and Master of Science in Biology from George Washington University, as well as a Masters in Business Administration from George Mason University.
4. I am and have been a board-certified toxicologist, otherwise known as a Diplomate of the American Board of Toxicology, continuously since 1996.
5. I have more than 20 years of experience designing, conducting and reviewing toxicological risk assessments.
6. AgLogic asked me to conduct an acute aggregate dietary exposure and risk assessment for aldicarb using the Dietary Exposure Evaluation Model software with the Food

Commodity Intake Database (DEEM-FCID) using methods identical to those used by the U.S. Environmental Protection Agency (US EPA) in its assessment in 2016.<sup>1</sup>

7. The exposure assessment I conducted for AgLogic was intended to estimate potential exposure of the general US population and all sub-populations to aldicarb assuming that 20% of the US citrus crop is treated with aldicarb. For this assessment I used as a starting point the basic data files and assumptions provided by the US EPA in 2016. In addition to the assumed use of aldicarb on 20% of the citrus crop, two assumptions in my aggregate exposure assessment differed from the US EPA: (1) The US EPA assumed that 100% of the imported crops supported by tolerances are treated with aldicarb, while I assumed that no aldicarb residues were in/on imported crops because aldicarb is not registered anywhere outside the US. (2) The aldicarb residue levels in water that I used in the exposure assessment were provided in a report prepared by Waterborne Environmental for AgLogic.<sup>2</sup> The DEEM modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions as described above.

8. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure.<sup>3</sup> Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results

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<sup>1</sup> US EPA, 2016. Memorandum: Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessments for Registration Review Risk Assessment. From: Ideliz Negrón-Encarnación, to: Susan Bartow. PC Code: 098301, DP Barcode: D430197, Office of Pesticide Programs, Office of Chemical Safety and Pollution Prevention, US Environmental Protection Agency, 3/28/2016. 34 pages.

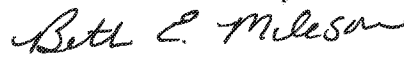
<sup>2</sup> Ritter, A.M. 2017. Aldicarb: Drinking Water Exposure Assessment. Unpublished report by Waterborne Environmental Inc. Study No.: 245.01. November 14, 2017. 22 pages. MRID 50549101.

<sup>3</sup> Milesen, B.E. 2017. Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessment for Proposed Uses. Unpublished report by Technology Sciences Group, Inc. Document No.: 20170230. December 28, 2017. 27 pages. MRID 50549102.

in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 24, 2018.

A handwritten signature in cursive script, appearing to read "Beth E. Miles".

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Beth E. Miles

# Curriculum Vitae Beth E Milesen

## **Beth E. Milesen, Ph.D., DABT**

Technology Sciences Group Inc.

Washington, DC 20036

Phone: (202) 828-8956

email: bmilesen@tsgusa.com

## **EDUCATION**

MBA, George Mason University, Fairfax, VA, (2013)

PhD, Toxicology, University of North Carolina, Chapel Hill, NC (1989)

MS, Biology/Zoology, George Washington University, Washington, DC (1984)

BA, Biology, George Washington University, Washington, DC (1981)

## **PROFESSIONAL EXPERIENCE**

### **Technology Sciences Group Inc. (TSG)**

**2001 to Present**

*Technology Sciences Group Inc. is part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG), and provides state, federal and international expertise on a wide range of scientific and regulatory issues. With experts in regulatory affairs, chemistry, toxicology, environmental fate and risk assessment, TSG provides services in support of the development, registration, compliance and defense of chemically related products. Clients include chemical, pesticide, consumer product, food, personal care and animal health companies, as well as industry groups, trade associations, and law firms.*

### **Principal Scientific Consultant, Team Leader**

#### **Responsibilities include:**

- Create comprehensive toxicology and risk assessment strategies to inform clients' business decisions and achieve their regulatory goals;
- Design and conduct human health and ecological risk assessments to support product stewardship, registrations and certifications;
- Meet with federal and state officials and stakeholder groups to discuss and resolve scientific issues;
- Design toxicology testing programs and testing strategies to support new and existing products;
- Support TSG management and staff in scientific and administrative matters.
- Clients include large producers and marketers of consumer products, chemicals and pesticides, as well as a number of small businesses, biotech firms, and trade associations.

### **ARCADIS**

**2000 to 2001**

*ARCADIS is an international company that provides consultancy, design, engineering and management services in the fields of Infrastructure, Water, Environment and Buildings. With more than 22,000 employees and more than \$3.3B in revenues the company has an extensive international network that is supported by strong local market positions.*

## Curriculum Vitae Beth E Milesen

### Principal Scientist

#### Responsibilities included:

- Develop toxicological and human health risk assessments for site-specific and chemical-specific scenarios,
- Develop and maintain client relationships,
- Mentor junior staff.

### **ILSI Risk Science Institute**

**1996 to 2000**

*The International Life Sciences Institute (ILSI) is a nonprofit, worldwide organization whose mission is to provide science that improves public health and well-being. It achieves this mission by fostering collaboration among experts from academia, government, and industry on conducting, gathering, summarizing, and disseminating science. Its activities focus primarily on nutrition and health promotion; food safety; risk assessment; and the environment.*

### Senior Scientist

#### Responsibilities included:

- Design and implement programs to advance the scientific basis of risk assessment;
- Create proposals outlining goals and objectives, strategic plans and budgets necessary to complete projects;
- Collaborate with scientists from U.S. and international agencies and organizations including the U.S. Environmental Protection Agency, Food and Drug Administration and Organization for Economic Cooperation and Development;
- Direct and chair working groups composed of scientists from academia, industry, government and public interest groups and stimulate them to reach consensus on difficult scientific issues.

#### Projects included:

1. Develop principles to determine what constitutes a common mechanism of toxicity;
2. Develop guidance for the design and interpretation of studies to characterize acetylcholinesterase activity in the peripheral nervous system;
3. Develop a framework for cumulative risk assessment; and
4. Evaluate experimental methods to identify and characterize developmental neurotoxicity.

### **NC Department of Environment & Natural Resources**

**1992 to 1996**

*The North Carolina Department of Environment and Natural Resources (DENR) Division of Air Quality (DAQ) works to protect and improve outdoor, or ambient, air quality in North Carolina for the health, benefit and economic well-being of all. To carry out this mission, the DAQ operates a statewide air quality monitoring network to measure the level of pollutants in the outdoor air, develops and implements plans to meet future air quality initiatives, assures compliance with air quality rules, and educates, informs and assists the public with regard to air quality issues.*

### Toxicologist

#### Responsibilities included:

- Design, conduct, and interpret large-scale ambient sampling studies used to characterize concentrations of toxic air pollutants and assess citizen exposure and risk,
- Direct the DENR Secretary's Scientific Advisory Board on Toxic Air Pollutants (SAB),
  - Work with scientists from research institutions, universities, government and industry;
  - Identify toxic air pollutants (TAPs) of concern to North Carolina;

## Curriculum Vitae Beth E Milesen

- Conduct risk assessments for TAPs based on primary literature.

### **Projects included:**

1. Design and direct large-scale ambient monitoring studies to measure TAPs emitted by petroleum terminals, wood furniture manufacturing facilities and polyurethane foam producing facilities;
2. Assess potential human exposure to emissions from hazardous waste-burning incinerators, phosphate mining operations, petroleum terminals and furniture manufacturing facilities based on measured ambient levels and modeled concentrations of TAPs;
3. Prepare risk assessments and derive acceptable ambient levels (AALs) for many toxicants, including, allyl chloride, toluene diisocyanate, methylene chloride and formaldehyde.

### **Duke University Medical Center**

**1989 to 1991**

*Duke University has about 13,000 undergraduate and graduate students and a world-class faculty helping to expand the frontiers of knowledge.*

### **Research Associate, Department of Pharmacology and the Center for the Study of Aging**

#### **Responsibilities included:**

- Design and conduct behavioral, neurochemical and neuropharmacologic studies to determine toxicologic mechanisms involved in selective neuronal degeneration that occurs following transient forebrain ischemia, an animal model of stroke;
- Supervise undergraduate and graduate students and technical staff.

#### **Projects included:**

1. Complete three comprehensive studies on neuronal degeneration,
2. Publish the results in the peer-reviewed literature;
3. Fulfill postdoctoral training in sociology, physiology, cardiology, and disease in aging populations.

### **University of North Carolina- Chapel Hill**

**1985 to 1989**

*The University of North Carolina at Chapel Hill prides itself as the nation's first public university, serving North Carolina, the United States and the world through teaching, research and public service.*

### **Doctoral candidate, Curriculum in Toxicology in the Medical School of UNC – Chapel Hill**

#### **Responsibilities included:**

- Conduct research in Dr. Richard Mailman's Neurotoxicology Laboratory on the effects of toxicants on brain dopamine neurotransmission in rats;
- Train and supervise laboratory technicians.

**George Washington University**

**1980 to 1984**

*The George Washington University is located in the nation's capital and is an institution with a history of dedication to educating and preparing future leaders.*

**Master's degree candidate, Department of Biological Sciences**

- Conduct research in Dr. Randall Packer's laboratory to determine how acid-base balance in tropical land crabs is affected by changing environmental temperature;
- Teach human and advanced human physiology to undergraduate students.

**Undergraduate Student Researcher, Department of Biological Sciences**

- Conduct undergraduate research in the laboratory of Dr. John Burns, to determine the seasonal variation in the reproductive biology of tropical poeciliid fish in the absence of significant seasonal changes in day-length.

**CERTIFICATIONS**

Diplomate of the American Board of Toxicology, 1996; recertified: 2001, 2006, 2011, 2016

**PROFESSIONAL MEMBERSHIPS**

Society for Risk Analysis  
Society for Neuroscience  
Society of Toxicology  
American Association for the Advancement of Science

**INVITED PARTICIPANT IN WORKING GROUPS/TASK FORCES**

- **Workshop:** Risk Assessment Methodologies Workshop on Approaches to Weight of the Evidence Evaluation in Risk Assessment, ILSI Health and Environmental Sciences Institute, December 2006.
- **Working Group:** Food Safety in Europe: Risk Assessment of Contaminants in Food, **European Union Concerted Action and ILSI Europe**, January-October 2000
- **Workshop:** Threshold of Toxicological Concern, **ILSI Europe**, October 1999
- **Workshop:** The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- **Working meeting** for development of Total Risk Integrated Model, **U.S. EPA**, June 1996
- **Workshop:** Mechanism-based Toxicology in Cancer Risk Assessment: Implications for Research, Regulation and Legislation, **National Toxicology Program**, January 1995
- **Working Group:** Board of Scientific Counselors Ad Hoc Working Group to review the Criteria for Listing Carcinogens, **National Toxicology Program**, April 1995
- Task Force on Risk-Based Protocol for Determination of Soil and Water Clean-up Levels, **NC Department of Environment and Natural Resources**, 1995-1996

## Curriculum Vitae Beth E Milesen

- Ad Hoc Committee for Air Quality Standards **ACGIH**, 1995
- Air Toxics Committee member, **State and Territorial Air Pollution Program Administrators (STAPPA) and Association of Local Air Pollution Control Officials (ALAPCO)**, 1994-1996

### INVITED PRESENTATIONS

- *Cumulative Risk Assessment of OP Pesticides in the Diet based on a Probabilistic Method for Exposure Assessment.* at the Asia-Wide Symposium on Risk Assessment of Contaminants in Food, Seoul, South Korea, **Korea Food and Drug Administration**, November 1999
- *A Framework for Cumulative Risk Assessment* at the workshop: The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- *A Comparison of Three Methods to Cumulate Risk Due to Exposure to Multiple Chemicals that Act by a Common Mechanism of Toxicity.* **American Crop Protection Association**, December 1998
- *Common Mechanism of Toxicity, Report of the ILSI RSI Working Group.* **EPA FIFRA Scientific Advisory Panel**, 1998
- *Common Mechanism of Toxicity: A Case Study of OP Pesticides* **EPA OPP Pesticide Program Dialogue Committee**, 1998
- *Procedures and Functions of the Secretary's Scientific Advisory Board on Toxic Air Pollutants.* **NC Legislative Committee on Air Quality** 1996
- *Monthly Briefing* Air Quality Committee of the **North Carolina Environmental Management Commission**, 1995-1996
- *Investigation of Bulk Gasoline Terminals at Paw Creek, Mecklenberg County, NC.* **NC Legislative Environmental Review Committee**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation*, **Press Conference**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation*, **Public Meeting**, February 1994
- *Reconciliation of the NC Regulations for Control of Toxic Air Pollutants with the Federal Clean Air Act of 1990.* **NC Aggregates Association**, May 1993 and **Guilford County LEPC Industry Forum Meeting**, May 1993

### ADDITIONAL PROFESSIONAL ACTIVITIES

- Partner with ILSI Europe on **A European Commission Concerted Action** on Risk Assessment of Chemicals in Food and Diet, April, 2000-February 2001
- Organized and chaired a symposium on Cumulative Risk Assessment at the **Society for Risk Analysis Annual Meeting**, December 1999
- Nominated as a potential member of the **EPA FIFRA Scientific Advisory Panel** (declined due to participation in ILSI activities germane to issues considered by the SAP) October, 1997
- Member of the Editorial Advisory Board, **Reviews in Toxicology**, **IOS Press** (2001).



**FULL LENGTH REFEREED PUBLICATIONS**

1. Milesen, B.E., Packer, R.K., 1986. Hemolymph acid base balance in the terrestrial crab, *Gecarcinus ruricola*, with changing environmental temperature. **Comp. Biochem. Physiol.** 85A:4;715719.
2. Milesen, B.E., Schwartz, R.D., 1991. The use of locomotor activity as a behavioral screen for neuronal damage following transient forebrain ischemia in gerbils. **Neuroscience Letters** 128; 71-76.
3. Milesen, B.E., Lewis, M.H., Mailman, R.B., 1991. Dopamine receptor "supersensitivity" occurring without receptor up-regulation. **Brain Research**, 561; 1-10.
4. Schwartz, R.D., Yu, X., Wagner, J., Ehrmann, M., Milesen, B.E., 1992. Cellular regulation of the benzodiazepine/GABA receptor: arachidonic acid, calcium, and cerebral ischemia. **Neuropsychopharmacology**, 6; 119-125.
5. Milesen, B.E., Ehrmann, M.L., Schwartz, R.D., 1992. Alterations in the GABA-gated chloride channel following transient forebrain ischemia in the gerbil. **Journal of Neurochemistry**, 58; 600-607.
6. Lawler, C.P., Gilmore, J.H., Mooney, D.H., Mayleben, M.A., Atashi, J.R., Milesen, B.E., Wyrick, S.D., Mailman, R.B., 1993. A rapid and efficient method for the radiosynthesis and purification of [125I]SCH23982. **Journal of Neuroscience Methods**, 49; 141-153.
7. Milesen, B.E., Chambers, J.E., Chen, W.L., Dettbarn, W., Ehrich, M., Eldefrawi, A.T., Gaylor, D.W., Hamernik, K., Hodgson, E., Karczmar, A.G., Padilla, S., Pope, C.N., Richardson, R.J., Saunders, D.R., Sheets, L.P., Sultatos, L.G., Wallace, K.B., 1998. Common mechanism of toxicity: A case study of organophosphorus pesticides. **Toxicological Sciences**, 41; 8-20.
8. Milesen, B.E., Chambers, J.E., Ehrich, M., Hamernik, K., Hodgson, E., Reith, J.P., Saunders, D.R., Sheets, L.P., Sultatos, L.G., Van pelt, C., Wallace, K.B., 1999/2000 Common mechanism of toxicity: evaluation of carbamate pesticides. **Reviews in Toxicology**, 3; 127-138.
9. Milesen, B.E., Ferenc, S.A., 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment: overview. **Environmental Health Perspectives**, 109 (suppl 1); 77-78.
10. Cory-Slechta, D.A., Crofton, K.M., Foran, J.A., Sheets, L.P., Ross, J.F., Weiss, B., **Milesen, B.E.** 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment. II: behavioral considerations. **Environmental Health Perspectives**, 109 (suppl 1); 79-91
11. Dorman, D.C., Allen, S.L., Byczkowski, J.Z., Claudio, L., Fisher, J.E., Fisher, J.W., Harry, G.J., Li, A.A., Makris, S.L., Padilla, S., Sultatos, L.G., **Milesen, B.E.** 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment. III: Pharmacokinetic and pharmacodynamic considerations. **Environmental Health Perspectives**, 109 (suppl 1);101-111.
12. Edler L, Poirier K, Dourson M, Kleiner J, **Milesen B**, Nordmann H, Renwick A, Slob W, Walton K, Wurtzen G. 2002. Mathematical modeling and quantitative methods. **Food Chem Toxicol.** 40(2-3):283-326.

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13. Gargas M.L., Kinzell J.H., Milesen B.E. 2009. Foreword to a special issue of Inhalation Toxicology on a risk assessment for iodomethane. **Inhal Toxicol.** 21(05-07); 447.
14. Milesen B.E., Sweeney L.M., Gargas M.L., Kinzell J.H. 2009. Iodomethane Human Health Risk Characterization. **Inhal Toxicol.** 21(05-07); 583-605.

### BOOK CHAPTERS AND NONREFEREED PUBLICATIONS

1. Mailman, R.B., Milesen, B.E., Lewis, M.H., 1987. Neurotoxicity expressed through alterations of cell cell interaction. in: **Biochemical mechanisms and regulation of intracellular communication.** Princeton Scientific Publishing, Princeton, N.J. pp 97112.
2. Milesen, B.E., Hedrick, M., 1996. Evaluation of emissions from a bulk petroleum terminal cluster in Mecklenberg County, NC. **Air & Waste Management Meeting Proceedings, 1995 meeting.**
3. Milesen, B.E., 1996. Investigation of toxic air pollutants emitted by wood furniture manufacturing facilities in Caldwell County, North Carolina. **NC DEHNR Air Quality Investigation Report**
4. Milesen, B.E., 2001. Guest Perspective: EPA Pesticide Cumulative Risk Model Evolution Continues. **Risk Policy Report.** Volume 8 (10) 30-32.

### ABSTRACTS

1. Gatzky, J.T., Milesen, B.E., 1986. Permeability of excised rat urinary bladder and separation of the urothelium. **ASPET-SOT Abstract.**
2. Milesen, B.E., Lewis, M.H., Mailman, R.B., 1987. Regulation of dopamine receptor sensitivity: effects of 1-methyl-4-phenylpyridinium on priming. **Soc. Neuroscience Abstracts** 13; 27.20.
3. Lewis, M.H., Keresztury, M.F., Walker, Q.D., Cook, L.S., Milesen, B.E. Mailman, R.B., 1987. Diabetes-induced polydipsia in rats: dependence on intact dopamine function and mediation by central insulin. **Soc. Neuroscience Abstracts** 13; 67.13.
4. Milesen, B.E., Mailman, R.B., 1988. Disparate consequences of two distinct 6-hydroxydopamine (6-OHDA) brain lesions in rats. **The Toxicologist** Feb. 1988. Abstract
5. Milesen, B.E., Mailman, R.B., 1988. Comparison of behavioral and biochemical consequences of two distinct models of central dopaminergic denervation supersensitivity. **Soc. Neuroscience Abstracts** 14; 375.2.
6. Milesen, B.E., Mailman, R.B., 1989. Autoradiographic evaluation of D1 and D2 dopamine receptors following central dopaminergic denervation. **Soc. Neuroscience Abstracts** 15; 236.7.

## Curriculum Vitae Beth E Milesen

7. Milesen, B.E. and Schwartz, R.D., 1990. Effects of bilateral carotid occlusion (BCO) on GABA<sub>A</sub> receptor function in Mongolian gerbil brain. **Soc. Neuroscience Abstracts** 16; 385.14.
8. Ehrmann, M.L., Milesen, B.E., Edgar, P.P., Schwartz, R.D., 1990. Effects of bilateral carotid occlusion (BCO) on the GABA<sub>A</sub> receptor/chloride channel in Mongolian gerbil brain: autoradiography using <sup>35</sup>S-TBPS. **Soc. Neuroscience Abstracts** 16; 385.15.
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# **ATTACHMENT 2**

## Letters from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida

The attached 11 letters were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the sworn affidavits that were submitted by these researchers and citrus growers.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC -- 10/16/17**

(Also see the sworn affidavit from Dr. Philip Stansly, dated 5/21/18)

*"There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane."*

**2. Walter T. Jerkins, President, Premier Citrus LLC -- 10/11/17**

(Also see the sworn affidavit from Walter T. Jerkins, dated 5/23/18)

*"Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus."*

**3. John Gose, General Manager, Lykes Bros. Inc -- 10/2/17**

(Also see the sworn affidavit from John Gose, dated 5/17/18)

*"We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc -- 9/28/17**

(Also see the sworn affidavit from William Roe, dated 4/27/18)

*"As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant*

*and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product.”*

**5. Steve Ryan, President, Alico Citrus -- 10/10/17**

(Also see the sworn affidavit from Dave Owens, Director of Chemical Sales, Alico Citrus, dated 5/29/18)

*“As a fresh fruit packer we recognize Aldicarb’s extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product.”*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 10/11/17**

(Also see the sworn affidavit from Tim Dooley, dated 5/17/18)

*“Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!”*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC – 11/3/17**

(Also see the sworn affidavit from Marvin Kahn, dated 5/xx/18)

*“We have had experience using Aldicarb in the past and have witnessed firsthand its positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods.”*

**8. Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP – 10/20/17**

(Also see the sworn affidavit from Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP, dated 5/23/18)

*“I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers*

*who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials."*

**9. John Barden, Vice President, Barben Fruit Company Inc – 10/13/17**

(Also see the sworn affidavit from John Barden, dated 5/30/18)

*"Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid."*

**10. David Howard, Vice President Operations, Graves Brothers Company – 11/3/17**

*"Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control."*

**11. Keith Davis, Owner, Florida Fertilizer Company Inc -- 10/10/17**

*"Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements."*

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To: Antoine A. Puech, Managing Member, AgLogic Chemical LLC  
From: Dr. Philip A. Stansly, [pstansly@ufl.edu](mailto:pstansly@ufl.edu)  
Cc: Ron Hamel, Gulf Citrus Growers Association  
Date: 16 October 2017  
Subject: Re-registration of aldicarb

Dear Sir,

By means of this memo I would like to express my full support for the re-registration of Aldicarb in citrus. I am a research and extension entomologist working on citrus at this Center since 1989. My appointment is state wide with emphasis of the southwest growing regions which comprises about 25% of total citrus production in the state. During this time I have had considerable experience working with aldicarb, both pre and post greening (HLB) as you can see from the citations below. In my estimation aldicarb is an excellent product both in terms of efficacy as well as environmental and personal safety, thanks to the safeguards and stewardship actually in place.

There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane. Therefore, I urge that no effort be spared in registering aldicarb again for citrus in Florida and elsewhere in the US wherever citrus is grown. Please feel free to contact me for any additional information with respect to this issue.

Best Regards,

Digitally signed by Phil Stansly  
DN: cn=Phil Stansly, o=UF-IFAS, ou=SWFREC,  
email=pstansly@ufl.edu, c=US  
Date: 2017.10.16 11:58:17 -04'00'

Philip A. Stansly  
Professor of Entomology



**References cited:**

Stansly, P. A., and R. E. Rouse. 1994. Pest and yield responses of citrus to Aldicarb in a flatwoods grove. *Proceedings of the Florida State Horticultural Society* 107: 69-72.

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Croxtan, S. D., T. L. Stansly and P. A. Stansly. 2012. Timing of temik and movento applications for control of Asian citrus psyllid (ACP) *Diaphorina citri*, 2010. *Arthropod Management Tests*, 37: D1

Qureshi, J. A., and P. A. Stansly. 2008. Rate, placement and timing of aldicarb applications to control Asian citrus psyllid, *Diaphorina citri* Kuwayama (Hemiptera: Psyllidae), in oranges. *Pest Management Science* 64: 1159-1169.



P.O. BOX 690759  
Vero Beach, FL 32969

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 So Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech;

I am writing this letter with the intent to offer my full support as well as the full support of all of Premier's citrus related companies and clients in Florida for the re-registration of Aldicarb as a restricted use pesticide in Florida.

I currently serve as President of Premier Citrus and Premier Citrus Management, and together these companies have directly managed over 20,000 acres of citrus annually, in seven different Florida counties since 2005. Premier also operates one of the industry's largest fresh fruit packing houses, as well as one of the largest fresh citrus marketing companies. Prior to working with Premier, I managed the state's largest grove management company, Blue Goose Growers all the way back to 1980, including the Dole Citrus activities between 1983 and 2000.

My experience in crop management goes all the way back to 1975, but closer to 1980 when I first became actively involved and responsible for the selection and use of citrus pesticides. Since Aldicarb first became available in Florida, we used the product on practically all of our managed acres at the labeled rate due to the easiest of all metrics to track: higher earnings.

Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus.

Improved yields were most often a result of improved size, which always carries a premium in the fresh fruit business. That size improvement as well as overall blemish control was easily noticed in the packinghouse and drove more favorable size and quality packages, again driving up revenues for fresh fruit as well as juice fruit.

In fact, the product was so important to our annual production plan that actively participating in complying with the Stewardship program was a high company priority to insure

that by our safe use we could help the registrant keep the product available out into the future. It was a major disappointment when Bayer voluntarily pulled the label in 2010, and we believe strongly that its discontinued use and loss of the PGR and other effects coincided and contributed to both our company and the Florida industry yield decline as the additional pressure of ACP and HLB expanded and has contributed to this day.

Premier's current nucleus of excellent grove managers happen to be the remnants of one of the industry's largest Aldicarb applicators prior to 2010, and we have access to those same machines now. Together with those machines and experienced managers and applicators, Premier could be in the application business as quickly as anyone, as we have the weight of the grove financial base also pushing for this application capability.

The availability of Aldicarb will be a valuable offset to the nagging weak tree health that continues to suffocate our yields. HLB has the Florida industry on its heels, and with the last hurricane, it's fair to say we're desperate to obtain any tools that can even incrementally get us back to improved productivity and revenues to keep us in business.

Please keep up your best effort to obtain a registration by whatever means necessary, and consider Premier a strong supporter willing to help you at every turn.

Thank you for considering our need and our support of your pursuit of the use of Aldicarb for Florida citrus growers.

A handwritten signature in black ink, appearing to read "Walter T. Jerkins, Jr.", with a stylized flourish at the end.

Walter T. Jerkins, Jr.  
President, Premier Citrus, LLC  
625 66th Ave SW, 32968  
Vero Beach, Florida  
Ph: 772-469-1549, Mobile: 772-473-9754

# LYKES BROS. INC.

7 Lykes Road  
Lake Placid, FL 33852-9582



Telephone: (863) 465-4127  
FAX: (863) 465-2289

To: Antoine Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

October 2, 2017

Dear Mr. Puech,

My name is John Gose and I am the General Manager for Lykes Bros. Inc. Our company has been a major player in the citrus industry for many decades now. We have over 6,000 acres of active citrus land with various varieties of oranges for juice. We have been in a war against HLB for many years and time is running out for many growers. Just five short years ago we were at over 16,000 active citrus acres. The loss of over 10,000 acres is a direct result of citrus greening. The need is great to resurrect a product that will help us fight multiple pests as well as promote tree health and growth and increase fruit yields.

As a grower we used aldicarb in the past under the registered name of Temik. We are aware that aldicarb requires precise application and safety requirements and I can assure you we are prepared to follow the stringent program in our groves. The reinstatement of aldicarb in the citrus industry is crucial to our survival. We recently suffered major setback due to Hurricane Irma and that toppled with the constant pressure of Citrus Greening has many growers in a fight to stay in business. We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops.

John Gose,

A handwritten signature in black ink, appearing to read 'John Gose'.

General Manager

# Wm. G. Roe & Sons, Inc.

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SPECIALIZING IN FRESH TANGERINES, FRESH BLUEBERRIES AND CITRUS JUICES

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Peace River Valley  
Blue Lake  
Tru-Tone  
Tru-Type  
Blu-Knight

To: Antoine Puech  
Managing Member AgLogic Chemical LLC  
121 South Estates Drive, Suite 101  
Chapel Hill, NC 27514

From: Bill Roe  
VP Operations Wm. G Roe & Sons Inc.  
Winter Haven, FL 33882

Date: September 28, 2017  
Re: AgLogic 15GG Aldicarb pesticide

Dear Mr Puech:

I am writing this letter in support of the re-registration of Aldicarb as a restricted use pesticide for use on Florida citrus.

Our company Wm G Roe & Sons is a long standing player in the citrus industry in Florida. We own manage or operate approximately 3,000 acres of citrus across various locations throughout the citrus belt. We have a diversified portfolio of varieties which range from Pomelo to Tangerines and our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are the leading shipper of tangerines in the state of Florida and our brand Noble is highly respected in retail and terminal markets. We had used Aldicarb in the form of Temik for many years during the decades of the 80's, 90's, and 2,000's.

At one point during the 90's we were certified commercial applicators in addition to using it on all of our own acreage for which it could be permitted.

As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product.

We recognize that Aldicarb requires a stringent stewardship program to insure its safe and appropriate application. Florida had implemented a rigorous stewardship program through its Dept of Agriculture during the prior application period which required prior site inspections, well set-backs, and application permits specific to site. For many years this program was successfully administered and has a legacy of providing the industry with a proven tool to enhance tree vigor, yield and fruit quality.

As an industry besieged with disease and recent bad weather luck we sorely need this product for use in our groves to offset the deleterious impacts of Greening.

Sincerely,





October 10, 2017

Antoine Puech  
Managing Member  
Aglogic Chemical LLC  
121 S Estates Drive Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

My name is Steve Ryan and I am the President of Citrus Operations for Alico. Our company grows 32,000 acres of citrus throughout Florida. We currently have 250 full time employees as well as several hundred contract laborers.

We have been battling Huanglongbing, aka citrus greening, for several years and have seen our production decline rapidly as a direct result of this disease. One of our primary weapons against the vectors of this disease was Aldicarb which we used until it was taken off the market in 2010. Now is the time to resurrect this product as a much needed tool in our battle to stop the devastating ravages of this disease.

We at Alico understand that this product requires diligent stewardship activities and are committed to ensuring this product is used in a safe and responsible manner. Our company has experience in using millions of pounds of Aldicarb for over 20 years without incident.

The damage caused by Hurricane Irma has only exacerbated our need to have this product available to us as soon as possible. We appreciate the efforts of Aglogic in bringing this product back to the citrus industry. Alico is committed to assisting you however we can in obtaining regulatory approval. It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications.

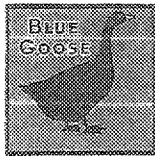
Thank you again for your efforts to get this product reinstated for the citrus industry. It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Ryan", is written over a circular stamp.

Steve Ryan  
President

12010 E Hwy 70  
Arcadia, FL 34266



**Blue  
Goose  
Growers**

**Florida Grove and Crop Management L.L.C**

P.O. Box 14709  
Ft Pierce, FL 34979  
Phone (772) 461-3020  
Fax (772) 468-4669

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S. Estates Dr., Suite 101  
Chapel Hill, NC 27514

**RE: Aldicarb (Temik) Re-Registration**

Dear Mr. Puech:

As General Manager of Blue Goose Growers, a 10,000 acre citrus management company, located on the east coast of Florida, I fully support your effort to re-register Temik for use on citrus in Florida.

As you are aware, our industry is suffering and in need of every available tool to control the spread of citrus greening and make this industry viable again. Allowing Temik to be used again on citrus in Florida will once again allow us to have a familiar product, a product that works, to control the pests that carry diseases that threaten our citrus crops.

Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!

We all genuinely appreciate your effort to expedite this re-registration effort, and look forward to having Temik available for use.

Sincerely Yours,



Timothy J. Dooley  
VP/GM, BGG

## Antoine Puech

---

**From:** Marvin Kahn <mkahn@kahngrove.com>  
**Sent:** Friday, November 03, 2017 3:52 PM  
**To:** Antoine Puech  
**Cc:** mikes@flicitrusmutual.com; Andrew Meadows; Trevor Murphy  
**Subject:** Aldicarb

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Good afternoon Mr. Puech,

We are a third-generation citrus growing operation, with experience in the industry dating back to the 1930s when my father purchased his first orange grove. We have had experience using Aldicarb in the past and have witnessed firsthand it's positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods. Please let us know if there is anything we can do to assist you in this process.

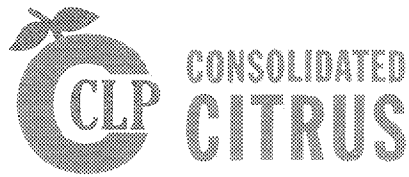
If you have not heard from the five or so grower organizations CEO's , we or Mike Sparks and Andrew Meadows could help in this regard.

Regards,

Marvin Kahn  
Kahn Citrus Management, LLC  
Murphy Ag Solutions of the Heartland, LLC  
P.O. Box 3346  
Sebring, FL 33871  
863-381-0384 (Cell)  
863-385-6136 (Office)  
863-382-9737 (Fax)







10/20/2017

Michael Stewart, Manager  
Horticultural Services  
Consolidated Citrus LP  
63 Barn Rd.  
Venus, FL 33960

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

In my position as Manager – Horticultural Services for Consolidated Citrus LP, I am writing in support of AgLogic LLC's application to register AgLogic 15GG Aldicarb pesticide for use in citrus in the state of Florida. Consolidated Citrus has nearly 30,000 acres of citrus, making it one of the largest citrus production companies in Florida. I have used Aldicarb, as the branded product Temik, for many years under three different registrants, Union Carbide, Rhone Poulenc and Bayer Crop Science. I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials. If AgLogic 15GG Aldicarb is registered and priced right, Consolidated Citrus would very likely use it for both fresh and processed citrus fruit production. Thank you for your efforts to register this product.

Sincerely yours,

Michael Stewart, Manager  
Horticultural Services

63 Barn Road  
Venus, FL 33960

(p) 863-699-6090  
(f) 863-465-6837



October 13, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

Our company has been growing citrus in central Florida since the 1920's. The fifth generation has just joined us and expanded our farming operation to include blueberries. My two brothers and I manage the day to day farming activities personally meaning our boots are in the groves.

I am writing to support AgLogic Chemical LLC to pursue the registration for AgLogic 15GG Aldicarb for use in Florida citrus. For more than 20 years, Aldicarb (brand name Temik) was one of the most effective inputs to manage a broad range of citrus pests systemically in the tree. This resulted in substantial increases in fruit yields and quality as well as improved growth

The grower community is encouraged by your effort to get an Aldicarb product again registered in Florida citrus. Right now, growers are in the fight of their life against a disease known as HLB, or citrus greening. HLB is a vascular disease vectored by the Asian citrus psyllid (ACP). It is endemic to the state of Florida and it can kill a tree within two years. Our crop has shrunk by more than 66 percent since the onset of HLB.

No cure exists although a massive research effort over the past decade has made headway. Adding Aldicarb back to the toolbox will help slow the spread of the disease through an effective integrated management program. When Temik was registered in Florida citrus, growers followed an intensive stewardship program regulated at both the state and federal level. All application sites were monitored prior to the start of the approved application period. All wells at each site were identified, located, and flagged with a setback. The program clearly showed that Aldicarb can be used safely.

Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid.

Regards,

A handwritten signature in dark ink, appearing to read "John P. Barben".

John P. Barben  
VP, Robert J. Barben, Inc.  
VP, Barben Fruit Co., Inc.



November 3, 2017

Antoine A Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

I am writing this letter to offer my support, and the support of Graves Brothers Company, in the pursuit of re-registration of Aldicarb as a restricted use pesticide on Florida citrus.

Having been raised in Central Florida while working on family owned citrus properties, and as a graduate of The University of Florida Citrus Horticulture Program, I feel that my 30 years of citrus production experience qualifies me to encourage the return of Aldicarb (AgLogic 15GG) pesticide to the Florida Citrus Industry.

I currently manage the agricultural properties owned by Graves Brothers Company. GBC has been involved in Florida agriculture since the 1930's and currently owns and manages 9,000 acres of cattle, timber, vegetable, ornamental and citrus production in Florida. Over the last 70 years Graves Brothers Company has been heavily focused on all phases of the Florida Citrus Industry from nursery tree production through citrus harvesting, packing and sales.

We are struggling, as is the entire Florida Citrus Industry, with the bacterial disease Huanglongbing and its associated vector Asian Citrus Psyllid. The reduction in tree health brought on by this imported disease and its introduced vector has placed our entire industry on the precipice of collapse. Our industry is desperately in need of tools to combat this endemic disease.

Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control.

It is my understanding that Ag Logic 15GG will be labeled for application and use by the same Florida Rule (Rule 5E2.028) as in the past. The history of stewardship of Aldicarb by Florida Citrus Growers under these guidelines has proven that this product can be used safely and without any unacceptable environmental risk. The cadre of growers and applicators that were part of this successful history are more than capable of continuing this legacy in Florida citrus.

Please consider the needs of Graves Brothers Company and more specifically the needs of The Florida Citrus Industry as you endeavor to return this important tool to our diminished grower toolbox.

Sincerely,

David F Howard  
Vice President of Operations  
Graves Brothers Company  
2770 Indian River Boulevard, Suite 201  
Vero Beach, Florida  
Phone: 772.562.3886, Mobile: 772.473 9622

2770 Indian River Blvd; Suite 201, Vero Beach, Florida 32960-4230  
Phone (772) 562-3886 Fax (772) 562-3565  
[www://GravesBrothersCompany.com](http://www.GravesBrothersCompany.com)

ED\_002527\_00004577-00016

# FLORIDA FERTILIZER COMPANY, INC.

P.O. BOX 1087 • WAUCHULA, FL 33873-1087  
(863) 773-4159 • FAX # (863) 773-9363  
office@flfertilizer.com

October 10, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

My name is Keith Davis. I am a citrus grower, fertilizer and agricultural chemical supplier. I own approximately 175 acres of citrus, and make recommendations for many customers in the citrus industry.

I strongly support AgLogic efforts to register AgLogic 15GG for use on citrus in the state of Florida. As a citrus grower and chemical supplier, with almost 40 years of experience, I have seen firsthand what Aldicarb does for a citrus tree. Aldicarb makes it "Healthy"! Why? It reduces nematodes on the roots, and controls piercing and sucking insects. Aldicarb also increases pound solids of fruit, enables it to handle stress from cold weather, and should help trees survive and be able to withstand the effects of citrus greening (HLB) bacteria.

Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements.

AgLogic 15GG would be a great product to have for Florida citrus, to keep this great industry strong and viable.

Sincerely,



Keith Davis

Message

---

**From:** Keller, Kaitlin [keller.kaitlin@epa.gov]  
**Sent:** 8/15/2018 3:07:02 PM  
**To:** Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Baptist, Erik [Baptist.Erik@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]  
**Subject:** FW: Aldicarb SLN 8-6-2018 revised after meeting with AgLogic\_clean.doc  
**Attachments:** Aldicarb SLN fixing CB comments HIGHLIGHTED.doc; Aldicarb SLN fixing CB comments CLEAN.doc

## Deliberative Process / Ex. 5

Thanks,  
Kaitlin

---

**From:** Dinkins, Darlene  
**Sent:** Wednesday, August 15, 2018 10:48 AM  
**To:** Keller, Kaitlin <keller.kaitlin@epa.gov>  
**Subject:** FW: Aldicarb SLN 8-6-2018 revised after meeting with AgLogic\_clean.doc

Kaitlin,

## Deliberative Process / Ex. 5

*Darlene Dinkins*  
Office of Pesticide Programs  
U.S. Environmental Protection Agency  
(703) 305-5214

---

**From:** Goodis, Michael  
**Sent:** Wednesday, August 15, 2018 8:07 AM  
**To:** Messina, Edward <Messina.Edward@epa.gov>  
**Cc:** Keigwin, Richard <Keigwin.Richard@epa.gov>; Guilaran, Yu-Ting <Guilaran.Yu-Ting@epa.gov>; Dinkins, Darlene <Dinkins.Darlene@epa.gov>  
**Subject:** FW: Aldicarb SLN 8-6-2018 revised after meeting with AgLogic\_clean.doc

Ed

## Deliberative Process / Ex. 5

Michael L. Goodis, P.E.  
Director, Registration Division (RD)  
Office of Pesticide Programs (OPP)

Phone 703-308-8157  
Room S7623

**From:** Messina, Edward  
**Sent:** Tuesday, August 14, 2018 7:12 PM  
**To:** Goodis, Michael <Goodis.Michael@epa.gov>  
**Cc:** Keigwin, Richard <Keigwin.Richard@epa.gov>  
**Subject:** Fwd: Aldicarb SLN 8-6-2018 revised after meeting with AgLogic\_clean.doc

---

Ed Messina  
Acting Deputy Office Director (Programs)  
Office of Pesticide Programs  
U.S. EPA  
(703) 347-0209

Begin forwarded message:

**From:** "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>  
**Date:** August 14, 2018 at 6:59:10 PM EDT  
**To:** "Keller, Kaitlin" <keller.kaitlin@epa.gov>, "Messina, Edward" <Messina.Edward@epa.gov>, "Beck, Nancy" <Beck.Nancy@epa.gov>, "Baptist, Erik" <Baptist.Erik@epa.gov>  
**Subject:** Aldicarb SLN 8-6-2018 revised after meeting with AgLogic\_clean.doc

## Deliberative Process / Ex. 5

Message

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**From:** Keigwin, Richard [Keigwin.Richard@epa.gov]  
**Sent:** 8/9/2018 3:03:05 PM  
**To:** Baptist, Erik [Baptist.Erik@epa.gov]; Messina, Edward [Messina.Edward@epa.gov]  
**CC:** Beck, Nancy [Beck.Nancy@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]  
**Subject:** RE: OPP General Agenda Item; Temik  
**Attachments:** Aldicarb SLN 8-6-2018 revised after meeting with AgLogic\_clean.doc; ATT2.pdf; ATT1.pdf; 3588985\_1.pdf

## Personal Matters / Ex. 6

# Deliberative Process / Ex. 5

**From:** Baptist, Erik  
**Sent:** Thursday, August 09, 2018 10:53 AM  
**To:** Keigwin, Richard <Keigwin.Richard@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>  
**Cc:** Beck, Nancy <Beck.Nancy@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>  
**Subject:** OPP General Agenda Item; Temik

Rick and Ed,

# Deliberative Process / Ex. 5

Thanks,

**Erik Baptist**  
Senior Deputy General Counsel  
Office of General Counsel  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
(202) 564-1689  
[baptist.erik@epa.gov](mailto:baptist.erik@epa.gov)

July 2, 2018

**BY ELECTRONIC AND OVERNIGHT MAIL**

Rick Keigwin, Director  
Office of Pesticide Programs  
USEPA Headquarters  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N. W.  
Washington, DC 20460-0001  
([keigwin.richard@epa.gov](mailto:keigwin.richard@epa.gov))

Nancy Beck, Deputy Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
USEPA Headquarters  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N. W.  
Washington, DC 20460-0001  
([beck.nancy@epa.gov](mailto:beck.nancy@epa.gov))

Re: Critically Important Pesticide SLN to Help Embattled Florida Citrus Industry

Dear Sir and Madame:

This letter requests your – and the Agency’s – support for a FIFRA Section 24(c) Special Local Need registration (SLN) for AgLogic 15GG, a granular insecticide containing 15% aldicarb, to control Asian citrus psyllid, citrus rust mites, spider mites, aphids and nematodes on Florida citrus. The SLN application was filed with the Florida Department of Agriculture and Consumer Services (FLDACS) on June 1, 2018 by AgLogic Chemical, LLC, the sole U.S. registrant of aldicarb.

The key facts are these:

1. The Florida citrus industry is on “the brink of annihilation” (Dr. Phillip Stansly, Professor of Entomology, U. Fl., 10/16/17 Letter). It has been ravaged by the citrus greening disease (HLB), transmitted by the Asian citrus psyllid (ACP), and there has been an **80% loss** in production of citrus statewide.<sup>1</sup>
2. Florida growers are losing the battle against the spread of citrus greening disease. At best, the current toolbox of chemical treatments only modestly retards the advance of the disease, but does nothing to improve production. As stated by one grower: “Absent better tools citrus growers will be out of business soon!” (Tim Dooley, Vice President and General Manager, Blue Goose Growers, LLC, 10/11/17 Letter). The intensive use of foliar treatments to fight psyllids has also resulted in other pest problems, including the development of resistance as well as spikes in mite, weevil, and aphid populations.

---

<sup>1</sup>. At the time HLB was first discovered in 2003-2004, Florida orange production totaled 242 million boxes. In April 2018, the USDA National Agricultural Statistics Service estimated that just 45 million boxes of oranges would be harvested in 2017-2018 – a decrease of 197 million boxes, or 81%. USDA/NASS, Citrus April Forecast 2017-2018 Season (April 10, 2018) *available at*: [https://www.nass.usda.gov/Statistics\\_by\\_State/Florida/Publications/Citrus/Citrus\\_Forecast/2017-18/cit0418.pdf](https://www.nass.usda.gov/Statistics_by_State/Florida/Publications/Citrus/Citrus_Forecast/2017-18/cit0418.pdf).



3. ***The Florida citrus industry – including the largest growers in the state – enthusiastically support an SLN registration for AgLogic 15GG.*** Indeed, several prominent growers have taken the unusual step of submitting both signed affidavits (Attachment 1) and letters (Attachment 2) detailing why they so urgently need aldicarb.<sup>2</sup> As they explain, a unique attribute of aldicarb is that it stimulates tree health and root growth and ***markedly increases fruit size and yield***, precisely what growers need now to stay in business. Aldicarb is also effective against many pests, including psyllids, mites and nematodes, among others. As one grower has testified: “Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.” (John Gose, General Manager, Lykes Bros. Inc.; 5/17/18 Affidavit).
4. Florida citrus growers are familiar with aldicarb because they used the product (under the trade name, TEMIK 15G) with great results for several decades (~1978-2010), until Bayer, the sole registrant, *voluntarily* cancelled the registration and withdrew from the market, pursuant to a well-publicized corporate decision to exit all WHO Class 1 products.
5. FLDACS has advised AgLogic that it will not approve the SLN unless it is assured that EPA will not disapprove it. It is our understanding that EPA has not yet had the opportunity to review the SLN, attached affidavits and other materials demonstrating the Special Local Need for aldicarb. However, we also understand that there have been early indications by staff members in EPA’s OPP that OPP is inclined to ***deny*** the SLN.

We submit that OPP’s current disinclination to approve the SLN is unjustified and contrary to the public interest. The following points may clarify why we believe this:

6. At the time Bayer cancelled its aldicarb registrations, EPA was concerned about possible dietary risks to infants and children from consumption of food and drinking water containing aldicarb residues. For this reason, AgLogic’s subsequently-obtained registration for AgLogic 15GG, which is approved for use on cotton, peanuts and certain other crops, did not include use on citrus.
7. Over the past several years, aldicarb has undergone Registration Review. During this process, AgLogic implemented significant changes to the product label that result in aggregate dietary exposures to aldicarb well below the 2010 EPA Level of Concern. EPA has recently issued an Interim Registration Review Decision concluding that aldicarb may continue to be registered.
8. To assist the Agency in its assessment of aldicarb, including for use on citrus under a Florida SLN, AgLogic commissioned Dr. Beth Mileson, Principal Scientific Consultant, TSG Consulting, to conduct an acute dietary exposure and risk assessment for aldicarb.

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<sup>2</sup> For convenience, each attachment also includes a cover sheet highlighting relevant excerpts from the affidavits and letters, respectively.

This risk assessment was submitted to EPA earlier this year. Dr. Milesen's affidavit (included in Attachment 1) affirms that she conducted the risk assessment using models and methods identical to those used by EPA's risk assessors. The risk assessment demonstrates that 20% of the US citrus crop may be treated with aldicarb and dietary exposures (including food and water) for all sub-populations are well below any level of concern.

In short, there is no scientific basis for EPA to disapprove the SLN due to dietary risk.

\* \* \*

In summary, this SLN is critically important to a Florida citrus industry that desperately needs help. We urge you to take the steps necessary to ensure that OPP makes a full and fair assessment of the SLN, including its substantial benefits to American growers and consumers.

Time is of the essence. Application of AgLogic 15GG must occur during the dry season, which runs from mid-November through April at the latest. Even after the SLN is approved, several additional steps must be taken before applications can occur. Most important, AgLogic must identify applicators that have (or are willing to purchase) the necessary application equipment, and these applicators must be trained to ensure compliance with AgLogic's product stewardship program. Applicators must also petition FLDACS for permission to apply the product. Aldicarb has not been used on citrus since 2011, so considerable lead time is required to restart applications.

In furtherance of the process, AgLogic requests the opportunity to meet with the Agency as soon as possible to discuss the SLN and respond to any questions or concerns OPP may have. Depending on schedule, it is likely that one or more citrus growers and FLDACS officials will attend the meeting as well.

Thank you in advance for your attention to this important matter. Please do not hesitate to contact us if you have any questions or would like to discuss these issues further.

Sincerely,



James P. Rathvon  
Cristen S. Rose  
Counsel for AgLogic Chemical, LLC

Attachments

cc (by email and overnight mail):  
Richard Gebken, OPP  
Tawanda Maignan, OPP  
Antoine Puech, President/CEO of AgLogic

# **ATTACHMENT 1**

## **Affidavits from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida**

The attached 10 sworn affidavits were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the letters of support that were submitted by these researchers and citrus growers in late 2017.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC – 5/21/18**  
(Also see letter of support from Dr. Philip Stansly, dated 10/16/17)

*Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”*

*One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.*

*Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.*

**2. Walter T. Jerkins, President, Premier Citrus LLC – 5/23/18.**  
(Also see letter of support from Walter T. Jerkins, dated 10/11/17)

*Aldicarb is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.*

*Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.*

*The yield response from the use of aldicarb is robust, resulting in a sustained yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.*

*The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity - precisely the effects that are so desperately needed now by the citrus industry.*

**3. John Gose, General Manager, Lykes Bros. Inc – 5/17/18**  
(Also see letter of support from John Gose, dated 10/2/17)

*Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.*

*A serious drawback of foliar insecticides is that they can wipe out pollinators and other "beneficials" (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.*

*In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly higher pounds of solids per box, producing a very positive net economic return.*

*The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc – 4/27/18**  
(Also see letter of support from William Roe, dated 9/28/17)

*Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest*

*management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.*

*This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both - suppress psyllids and protect beneficials during bloom time - because of its systemic mode of action.*

*Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.*

**5. Dave Owens, Director of Chemical Sales, Alico Citrus -- 5/29/18**

(Also see letter of support from Steve Ryan, President, Alico Citrus, dated 10/10/17)

*Alicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides*

*The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.*

*Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 5/17/18**  
(Also see letter of support from Tim Dooley, dated 10/11/17)

*Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.*

*In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.*

*In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC -- 5/xx/18**  
(Also see letter of support from Marvin Kahn, dated 11/3/17)

*Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better - and are healthier - than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.*

*Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.*

*Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.*

**8. Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP -- 5/23/18**  
(Also see letter of support from Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP, dated 10/20/17)

*When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.*

*The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.*

**9. John Barden, Vice President, Barben Fruit Company Inc – 5/30/18**

(Also see letter of support from John Barden, dated 10/13/17)

*The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ACP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.*

*A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.*

*We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficial when we used aldicarb.*

**10. Dr. Beth Milesen, Principal Scientific Consultant, TSG Consulting – 5/24/18**

*The modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure. Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.*



**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF PHILIP A. STANSKY, Ph.D.**

I, Philip A. Stansky, do solemnly swear as follows:

1. I am Professor of Entomology at the University of Florida (UF), Southwest Florida Research and Education Center, 2686 State Road 29 North, Immokalee, FL 34142. I joined UF in 1986, and moved to the Immokalee location in 1989.

2. I hold a Ph.D. in Entomology from Texas A&M (1985), an M.S. in Zoology from the University of Oklahoma (1978), and a B.S. in Zoology from Wayne State University (1967).

3. I am a research and extension entomologist focused on the integrated management of pests affecting major crops grown in southwest Florida, with emphasis on citrus and vegetables. I am the lead author or co-author of more than 538 scientific publications and 158 extension publications in my field, including 172 peer-reviewed articles. I am also the editor of a book and author of 9 book chapters relating to pest management.

4. I develop and test integrated systems of economic and sustainable pest management and their component tactics. I consult with members of the agricultural community, and provide information, training and diagnostic services in collaboration with county and multi-county agents.

5. A key focus of my work for the last 13 years has been and remains the citrus greening disease or huanglongbing (HLB), transmitted by the Asian citrus psyllid (ACP)

*Diaphorina citri*. My work is multifaceted and has included research on the use of aldicarb to control ACP and other citrus pests and to improve citrus yields.

6. Aldicarb (brand name, Temik) was registered for use on citrus in Florida for nearly 30 years until Bayer voluntarily cancelled all of its aldicarb registrations and exited the business at the end of 2010. Subsequently, AgLogic Chemicals, LLC obtained an EPA registration for an aldicarb product similar to Temik, called, AgLogic 15G, labeled for use on several crops not including citrus. AgLogic 15 G was subsequently approved in 2017 for use in Florida on peanuts and cotton by the Florida Department of Agriculture and Consumer Services.

7. I am aware that, at the request of numerous citrus producers, AgLogic Chemicals LLC applied to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG for use on citrus in Florida.

8. In a letter dated October 16, 2017 (attached), I expressed support for this SLN registration in the strongest possible terms. As stated in my letter: “It may not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida’s iconic citrus industry.” Accordingly, I urged that “no effort be spared in registering aldicarb again for citrus in Florida.”

9. I write this Affidavit to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida today.

10. Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”

11. Aldicarb is applied to the soil where it is absorbed by the tree roots and works systemically. As a result, aldicarb provides continuous pest control over an extended period of time, on the order of 90-120 days. At the same time, aldicarb is known to increase root growth, which promotes greater tree health and can lead to larger and more abundant fruit. Our research

cited below from a large scale replicated experiment in a commercial orange grove confirmed increased yield from trees treated with aldicarb. Stansly, P. A., and R. E. Rouse. 1994.

Pest and yield responses of citrus to aldicarb in a flatwoods grove. Proceedings of the Florida State Horticultural Society 107: 69-72.

12. Aldicarb applied through granular applicators below the soil surface has well established integrated pest management and environmental advantages over pesticides that are repeatedly applied through foliar sprays. AgLogic 15 G aldicarb is directly applied into the soil where it is absorbed by the roots, and works systemically against a broad range of pests. As a result, it does not have the same adverse impact as many foliar insecticide sprays on pollinators and other “beneficials” (*e.g.*, wasps, lady beetles, lace wings, and spiders) – which are key to effective integrated pest management programs. The safeguards and stewardship programs that have been adopted over the years for aldicarb provide additional assurance that aldicarb can be used on citrus safely and effectively without harming human health or the environment.

13. The insecticides currently available to citrus growers are, for the most part, applied by ground or aerial spray which may be repeated every 3-4 weeks. Rain events – which are not infrequent during the growing season in Florida – can rapidly wash away these residues, further reducing efficacy. In contrast, once aldicarb is absorbed by the tree roots it will remain active for several months.

14. One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.

15. Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.

16. Another problem faced by citrus growers today is citrus canker. To control canker, growers typically apply a copper-based fungicides at regular intervals. Unfortunately, copper inhibits beneficial mites that control rust mites. As a result, rust mites are a significant problem in many citrus groves where copper has been applied to combat canker. Again, aldicarb is highly effective in providing residual control of rust mites reducing the need for additional sprays.

17. As I noted in my support letter, Florida's iconic citrus industry is in a life or death struggle with HLB for survival. Growers face a host of pest problems, most importantly ACP/HLB, but also rust mites, canker, nematodes, aphids, and others. Hurricane Irma has only exacerbated the difficulties growers now face. In these dire circumstances, growers need more and better management tools, particularly in the face of growing ACP resistance to the neonicotinoids. Aldicarb – a carbamate with a different mode of action– has a proven track record with the Florida citrus industry by providing broad control of psyllids and other important pests while enhancing root growth and fruit production. For all these reasons, I urge the Department to approve an SLN registration for AgLogic 15GG.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on 21 May 2018.

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Philip A. Stansly, Ph.D.

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF WALTER T. JERKINS, JR.**

I, Walter T. Jerkins, Jr., do solemnly swear as follows:

1. I am the President of Premier Citrus and Premier Citrus Management, 635 66<sup>th</sup> Ave. SW, Vero Beach, FL, 32968.

2. Premier is among the largest citrus producers in Florida, managing over 20,000 acres of citrus groves, located in seven (7) counties in Florida. Premier's fresh fruit package house also is one of the largest in Florida.

3. I have more than 40 years of experience in the citrus industry. After graduating from the University of Florida with a major in agriculture in 1975, I worked for about four (4) years at Southern Fruit Distributors, a Florida grower/processor. In 1980, I joined Blue Goose Growers, one of the state's largest grove management company, where I worked for more than 32 years. In 2013, I joined Premier as its President.

4. I am a founding member of Citrus Research and Development Foundation, Inc. (CRDF) and was its first President, a position I held for nine years (2011-Jan. 2018). The CRDF is headed by a 13-member Board of Directors that includes individuals from industry, academia, and government. The CRDF raises money and issues research grants to help companies develop products to combat citrus greening disease (HLB). Through my involvement in CRDF and knowledge of its research, I am well informed about the pest control products currently available

to the citrus industry and products still in the development pipeline. Aldicar is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.

5. I am not aware of any other single product or combination of products that provides the same yield improvement potential to the industry that aldicarb could provide, as discussed below.

6. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.

7. Premier enthusiastically supports AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 11, 2011 (attached), I affirmed Premier's strong support for this SLN registration.

8. The purpose of this Affidavit is to provide further explanation why aldicarb is urgently needed by citrus growers.

9. I have many decades of experience with the use of aldicarb on citrus. During the three decades that I was with Blue Goose Growers, we regularly used aldicarb (Temik) in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently had very positive experiences with aldicarb, which we regarded as a key tool in our arsenal to control insect pests and promote tree growth and fruit production. Year after year we found that when we used aldicarb, trees were healthier and more productive.

10. Premier also used aldicarb very regularly on virtually all of its citrus acres during the many years it was available. Based on my surveying of our grove managers here, Premier's positive experiences with aldicarb were very similar to those of Blue Goose Growers.

11. I have had discussions about aldicarb with many other growers in the industry over the years, including while I was CRDF President. The nearly universal consensus among citrus

producers is that aldicarb is a uniquely valuable product that offers a combination of benefits not provided by any other product or combination of products.

12. Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.

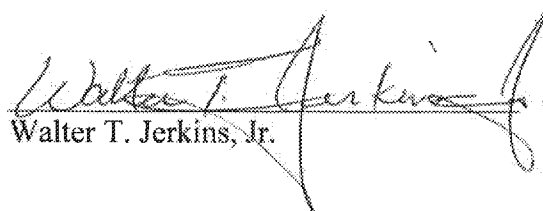
13. The yield response from the use of aldicarb is robust, resulting in a *sustained* yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.

14. The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity – precisely the effects that are so desperately needed now by the citrus industry.

15. For all these reasons, Premier urges the Department in the strongest possible terms to approve AgLogic’s application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.

  
Walter T. Jerkins, Jr.

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF JOHN GOSE**

I, John Gose, do solemnly swear as follows:

1. I am General Manager for Lykes Bros, Inc., 7 Lykes Road, Lake Placid, FL, 33852.
2. Lykes Bros a long-time major player in the Florida citrus industry. We have over 6,000 acres of active citrus groves. Over the last five years we have lost 50% of our citrus acreage due to Citrus Greening.
3. I have more than 40 years of experience in the citrus industry. My family owned citrus groves and I worked in those groves as a teenager. After I graduated from the University of Florida with a degree in agriculture/fruit crops in 1981, I accepted a position at Lykes Bros. I have worked at Lykes Bros in citrus management my entire career.
4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
5. We at Lykes Bros enthusiastically support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 2, 2011 (attached), I affirmed Lykes Bros' strong support for this SLN registration. As stated in my letter: "aldicarb ... is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."



6. The purpose of this Affidavit is to provide further explanation why citrus growers need aldicarb back in their toolbox.

7. Lykes Bros regularly used aldicarb (Temik) in citrus groves we managed for more than two decades, until it was voluntarily withdrawn from the market by Bayer in 2010. We consistently had very positive experiences with aldicarb. Based on our experiences, we consider aldicarb a uniquely valuable product that offers a combination of benefits not provided by any other registered product or combination of products.

8. Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.

9. A serious drawback of foliar insecticides is that they can wipe out pollinators and other “beneficials” (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.

10. In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly *higher pounds of solids per box*, producing a very positive net economic return.

11. The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root

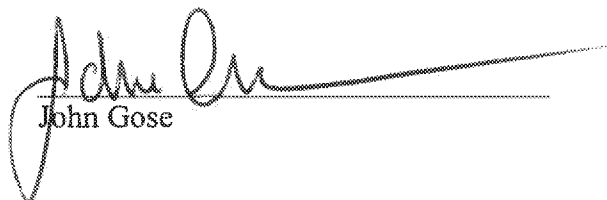
system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.

12. Another serious pest problem associated with citrus production in our groves is root weevils. Citrus greening disease interferes with the transport of sugars and other nutrients from the leaf canopy to the roots through the phloem. To compensate for this, we add nutrients to the soil to help feed the root system. Doing this, however, also supports root weevils (and nematodes). It is not an overstatement to say that root weevils are now a huge problem for Lykes Bros. Aldicarb is needed to combat this problem. When we were able to use aldicarb, we had few problems with root weevils. Root weevil larvae need moisture to come up from the soil and start feeding on the roots. When it was available, we applied aldicarb to soil in November and December. This application timing was perfect for knocking out root weevils before the next fruiting season.

13. For all these reasons, Lykes Bros urges the Department in the strongest possible terms to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 17, 2018.

  
John Gose

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**AFFIDAVIT OF WILLIAM G. ROE II**

I, William (Bill) G. Roe II, do solemnly swear as follows:

1. I am Vice President and Chief Operating Officer for Wm. G. Roe & Sons, Inc. My family has worked in the citrus industry for nearly a century. Wm. G. Roe & Sons, Inc., founded by my grandfather in 1927, is a long-standing player in the Florida citrus industry. We own, manage, or operate approximately 3,000 acres of citrus in various locations across the citrus belt. Our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are perennially one of the top 10 packers in the state. We are also the leading shipper of tangerines in Florida and our brand, Noble, is highly respected in the markets. We have the only private citrus plant breeding program in Florida, which specializes in tangerines.

2. I have more than 40 years of experience in the citrus industry. After graduating from Vanderbilt University in 1975, and taking courses in citriculture at Lake Alfred Citrus Research Station, FL, I began working full-time at Wm G. Roe & Sons in 1976. Prior to that, I worked part-time as a tractor driver and mechanic at the company, starting when I was in high school. I have held several positions at the company, from grove area manager to eventually production manager, a position I held for nearly 20 years. I also worked as our packing house manager for 10 years.

3. I served as President of the Florida Citrus Managers Association from 1986-87, and after appointment to the Florida State PRC, was its Chairman in 1996.

4. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. As stated in my letter dated September 28, 2017 (attached), Wm. G. Roe & Sons strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.

6. Today in Florida we have the benefit of a host of new insecticide chemistries for topical application through spraying. At the same time, Florida has been beset with the citrus greening disease (HLB,) which has manifested itself in a most virulent fashion. Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.

7. This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are

prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both – suppress psyllids and protect beneficials during bloom time – because of its systemic mode of action.

8. While the discussion in the previous paragraph focuses on psyllids, the same point applies to the various members of the scale family, mealybugs, and to some degree leaf miners. Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.

9. A phenomena of the past 12 years since citrus Canker has become endemic in the state has been the necessity of spraying copper every 21 days to control Canker lesions on the peel of many varieties. Canker lesions allow secondary infections to occur in the wounds of the fruit's peel, eventually causing the fruit to drop from the tree, so its control is mandatory for commercial growers. Although we have Streptomycin permitted for topical application and which helps, its application does not allow reduced applications of copper during the growing season. On the down side, application of copper creates a favorable micro-climate for mites to harbor on the peel of the fruit, making them quite difficult to control. When the fruit is quite susceptible during the late spring to Canker, the weather is generally hot and dry, which is perfectly suited for mite build-up even without copper deposits on the surface of the leaves and fruit. Aldicarb provides excellent mite control for an extended period during the spring, is not intrusive to either beneficials or honeybees, and accordingly was one of the reasons why most of the fresh fruit industry used aldicarb when it was available.

10. Another important reason why aldicarb is need by citrus growers today is that it promotes tree health and fruit production – what growers have called a PGR (plant growth regulatory) effect. It is hard to quantitatively assess aldicarb's PGR effect for citrus, but its use causes fruit to have enhanced high peel color and both measurably larger and more uniform size. It could be the combination of aldicarb negating the feeding and sucking of plant bugs and its impact on reducing the nematode population simultaneously, but in any case it is the only chemistry I have used in my 42 years in the industry which enhances the tree's performance and which unquestionably enhances the value of the fruit produced.

11. As growers, we are constantly trying to compensate for the much diminished root system caused by HLB by providing additional fertilizer and nutritional elements. Correspondingly, we are having to apply more foliar copper and leaf nutrients which are exacerbating mite populations. Aldicarb would be a most useful tool for the grower community and the environment by virtue of its providing enhanced control of a broad range of pests while enabling the grower to reduce topical pesticides.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April, 27 2018.

  
William (Bill) G. Roe II

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FIFRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
\_\_\_\_\_)

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FIFRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
\_\_\_\_\_)

**AFFIDAVIT OF DAVID OWENS**

I, David Owens, do solemnly swear as follows:

1. I am the Director of Chemical Sales for Alico Citrus, 12010 Hwy 70, Arcadia, FL, 34266. I have held this position since the end of 2015. My responsibilities at Alico include purchasing from, and liaising with, suppliers of pesticides, fertilizers, and other chemical products for use in citrus.

2. Alico, based in Fort Myers, FL, is among the largest citrus growers in the United States, with some 32,000 acres of citrus groves. In 2017, Alico was the country's largest citrus producer, producing 7.6 million boxes of fruit.

3. Prior to joining Alico, I worked in sales for Rhone Poulenc, and its corporate successors, Aventis and Bayer, for more than 20 years. During this time, I was responsible for the largest sales territory in Florida for the product, Temik, containing aldicarb. My work included talking with growers, interfacing with extension service scientists, and dealing with issues relating to registration, product application, stewardship and other matters. Overall, I have more than 35 years of experience with the citrus industry.

4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. We at Alico strongly support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 10, 2017 from Steve Ryan, President of Citrus Operations (attached), Alico affirmed its support for an SLN registration for aldicarb for citrus. As stated in that letter: "It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications. .... It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated."

6. I and Alico stand by these statements in the October 10, 2017 letter. The purpose of this Affidavit is to explain further why aldicarb is urgently needed by citrus growers, as it fills a need not met by any other product, or combination of products, currently available.

7. Alico has a long, positive history with aldicarb. Alico regularly used aldicarb (Temik) in its citrus groves for at least 20 years, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. Alico's very favorable experiences with aldicarb that spanned decades are the foundation for its strong support for an SLN registration for aldicarb.

8. Aldicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree



growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides.

9. No other product on the market has the same positive effects on tree health and fruit production that Alico – and many other citrus growers – have obtained with the use of aldicarb. During the years Alico used Temik/aldicarb, it realized a very favorable return on its investment in the use of the product year after year.

10. The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.

11. Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.

12. Although there are other products that are labeled for psyllid control, Alico has found that the efficacy of these products for psyllid control has plateaued in recent years. There is great concern at Alico and in the industry that resistance to these chemistries, particularly “neonics” such as imidacloprid, is growing. This is another reason why aldicarb is urgently needed at this time. Aldicarb, a carbamate class pesticide, provides a different mode of action and its use would greatly assist in managing psyllid resistance.

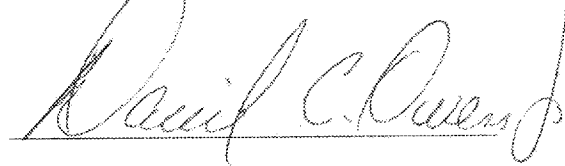
13. Aldicarb also provides well established environmental benefits. Because it is injected into the soil, it poses far less risk of harm to pollinators and other non-target beneficial insects than alternatives that are applied by foliar spray. The ability to use aldicarb would materially reduce the number of foliar applications of pesticides needed to control early season psyllids, and rust mites, greatly reducing the potential adverse impacts of harsher sprays on

beneficials and the environment. Aldicarb also has a much longer residual effect because it is distributed under the soil, and works best in wet soil. In contrast, foliar applications wash out in Florida's frequent rains and have to be repeated more often. It is fair to say that aldicarb is unique when it comes to controlling pests, while also increasing tree vigor and yields. There are also well established benefits of aldicarb on young trees. Aldicarb gives increased root flushes, and promotes the growth of young non-bearing and bearing trees.

14. For all these reasons, I urge the Department to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 29, 2018.

A handwritten signature in dark ink, appearing to read "David C. Owens", written over a horizontal line.

David Owens

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF TIMOTHY J. DOOLEY**

I, Timothy J. Dooley, do solemnly swear as follows:

1. I am the Vice President and General Manager of Blue Goose Growers, a citrus grove and crop management company based in Ft. Pierce, Florida. I have worked for Blue Goose Growers for approximately 27 years.
2. Blue Goose Growers manages approximately 10,000 acres of citrus trees.
3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
4. As stated in my letter dated October 11, 2017 (attached), Blue Goose Growers strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.
5. Citrus growers in Florida, including groves under Blue Goose Growers' management, have a long history of using aldicarb (Temik) successfully to control pests and threaten Florida's citrus crops.

6. Since aldicarb was removed from the market, the health of the Florida citrus industry has declined immensely. HLB is ravaging the industry, and growers are suffering from declining tree health and decreased fruit size and yield.

7. Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.

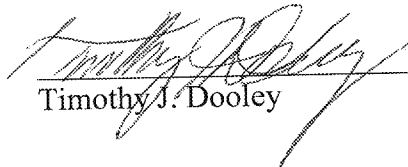
8. In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.

9. In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often.

10. There is no product or combination of products available to citrus growers today that offers the benefits of aldicarb. In addition to the longer residual control it provides, it is critically needed because it controls a wide range of pests, enhances tree health, and increases fruit production.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May, 17, 2018.

  
Timothy J. Dooley

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF \_\_\_\_\_) )  
Application of AgLogic Chemicals, LLC \_\_\_\_\_) )  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_) )  
Registration for \_\_\_\_\_) )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_) )  
\_\_\_\_\_)

**AFFIDAVIT OF MARVIN KAHN**

I, Marvin Kahn, do solemnly swear as follows:

1. I am the primary owner of Kahn Citrus Management (KCM), based in Sebring, FL. KCM manages thousands of acres of citrus in Polk, Highlands, Hardee and DeSoto counties, FL.
2. My father entered the citrus industry when he purchased his first orange grove in the 1930s. I have been a part of the citrus industry my entire working life, and have more than 60 years of experience in citrus management. (I just celebrated my 85<sup>th</sup> birthday.)
3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
4. As stated in my letter dated November 3, 2017 (attached), we at KCM fully support AgLogic's SLN application. Our support for this SLN registration is based on decades of favorable experiences that we have had with aldicarb (Temik), up until the end of 2010, when it was voluntarily withdrawn from the market by Bayer.
5. The purpose of this Affidavit is to explain further why aldicarb is so urgently needed by KCM and other citrus growers in Florida.
6. Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including

nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better – and are healthier – than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.


7. Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.

8. Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.

9. In summary, if aldicarb were available, growers would be able to control psyllids, rust mites, and other pests with fewer foliar sprays involving harsher chemistries. Overall, trees would be healthier and more productive, and there would be less damage to honeybees and other beneficials.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April \_\_, 2018.

  
\_\_\_\_\_  
Marvin Kahn

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF \_\_\_\_\_) )  
Application of AgLogic Chemicals, LLC \_\_\_\_\_) )  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_) )  
Registration for \_\_\_\_\_) )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_) )  
\_\_\_\_\_)

**AFFIDAVIT OF CODY LASTINGER**

I, Cody Lastinger, do solemnly swear as follows:

1. I hold the position of Manager – Horticultural Services for Consolidated Citrus, LP (“Consolidated”), 63 Barn Road, Venus, FL 33960. Consolidated is among the largest citrus producers in the United States, with some 30,000 acres of citrus groves.

2. I graduated from the University of Florida in 2013 with a Master’s in Agronomy and Weed Science. I received a second Master’s in Aquatic Plant Management from the University of Florida Gainesville in 2017. I became Manager – Horticultural Services at Consolidated very recently, after the former long-time Manager, Michael J. Stewart, recently retired.

3. I am aware that AgLogic is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG aldicarb pesticide for use on citrus in Florida.

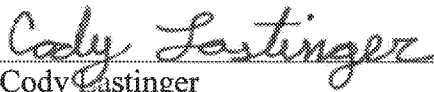
4. In a letter dated October 20, 2017 (attached), former manager Michael Stewart expressed Consolidated’s strong support for this SLN registration. This support is based on Consolidated’s many decades of favorable experiences with aldicarb (brand name, Temik), up through 2010, when it was voluntarily cancelled by Bayer. As stated in our October 20, 2017 letter: “When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective

pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.”

5. The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 23, 2018.

  
Cody Castinger



BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES

)  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FIFRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
)

**AFFIDAVIT OF ROBERT H. BARBEN AND JOHN P. BARBEN**

We, Robert H. Barben and John P. Barben, do solemnly swear as follows:

1. I, Robert H. Barben, am President and I, John P. Barben, am Vice President, of Robert J. Barben, Inc., 21 East Pine Street, Avon Park, FL 33825. Robert J. Barben, Inc. is a family business that traces its origins back to the 1920s. We have been in the business of growing and managing citrus for many decades. We currently manage about 1800 acres of citrus located in four counties in Florida.

2. We are aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

3. We at Robert J. Barben, Inc. strongly support AgLogic's SLN application for the use of aldicarb on citrus. In a letter dated October 13, 2017 (attached), we affirmed our unqualified support for this SLN registration.

4. The purpose of this Affidavit is to provide further explanation as to why aldicarb is urgently needed by Florida citrus growers today.

5. Our company has extensive experience with the use of aldicarb on citrus. During the 2-3 decades that aldicarb (brand name, Temik) was available to us, we used it regularly in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently saw very positive results with aldicarb. We found that when we used aldicarb, trees were healthier and more productive.

6. The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them.

7. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ASP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.

8. A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.

9. We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficials when we used aldicarb. Aldicarb is applied to the soil, not topically, and works systemically, so there is far less direct

exposure to beneficials with aldicarb.

10. The addition of aldicarb, which is a carbamate with a different mode of action, would be very helpful to citrus growers in managing pesticide resistance.

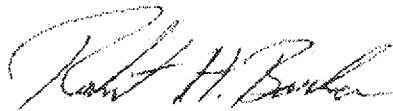
11. If aldicarb were available, we would apply it to the soil in winter months. This would enable us to reduce the number of foliar sprays by at least 2-3 during the spring months, which would reduce adverse impacts on beneficials.

12. Another reason why we urgently need aldicarb back is that it aldicarb increases root growth and fruit production. In our experience, using aldicarb is like giving the tree a steroid; the trees are healthier and there is a very definite growth response. Even more important economically, aldicarb increases the *pounds solids* produced by the tree. No other product compares to aldicarb in stimulating tree growth and fruit production.

13. In summary, aldicarb offers a unique combination of benefits not offered by any other single registered product or combination of registered products. These benefits include broad, long-lasting control of rust mites, minimal impacts on beneficials, and increased tree health and fruit production. These benefits are urgently needed by citrus growers now, more than ever. For these reasons, Robert J. Barben, Inc. urges the Department to approve an SLN registration for AgLogic 15 GG.

We declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.



Robert H. Barben



John P. Barben

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF BETH E. MILESON, PH.D.**

I, Beth E. Milesen, do solemnly swear as follows:

1. I hold the position of Principal Scientific Consultant, Team Leader, Toxicology at Technology Sciences Group, Inc. (TSG), based in TSG's office at 1101 17<sup>th</sup> Street, N.W., Suite 500, Washington, D.C., 20036. I have worked at TSG since 2001,
2. TSG is a part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG).
3. A copy of my Curriculum Vitae is attached. As reflected therein, I received a Ph.D. in Toxicology from the University of North Carolina in Chapel Hill in 1989. I also hold a Bachelor of Science in Biology/Zoology and Master of Science in Biology from George Washington University, as well as a Masters in Business Administration from George Mason University.
4. I am and have been a board-certified toxicologist, otherwise known as a Diplomate of the American Board of Toxicology, continuously since 1996.
5. I have more than 20 years of experience designing, conducting and reviewing toxicological risk assessments.
6. AgLogic asked me to conduct an acute aggregate dietary exposure and risk assessment for aldicarb using the Dietary Exposure Evaluation Model software with the Food

Commodity Intake Database (DEEM-FCID) using methods identical to those used by the U.S. Environmental Protection Agency (US EPA) in its assessment in 2016.<sup>1</sup>

7. The exposure assessment I conducted for AgLogic was intended to estimate potential exposure of the general US population and all sub-populations to aldicarb assuming that 20% of the US citrus crop is treated with aldicarb. For this assessment I used as a starting point the basic data files and assumptions provided by the US EPA in 2016. In addition to the assumed use of aldicarb on 20% of the citrus crop, two assumptions in my aggregate exposure assessment differed from the US EPA: (1) The US EPA assumed that 100% of the imported crops supported by tolerances are treated with aldicarb, while I assumed that no aldicarb residues were in/on imported crops because aldicarb is not registered anywhere outside the US. (2) The aldicarb residue levels in water that I used in the exposure assessment were provided in a report prepared by Waterborne Environmental for AgLogic.<sup>2</sup> The DEEM modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions as described above.

8. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure.<sup>3</sup> Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results

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<sup>1</sup> US EPA, 2016. Memorandum: Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessments for Registration Review Risk Assessment. From: Ideliz Negrón-Encarnación, to: Susan Bartow. PC Code: 098301, DP Barcode: D430197, Office of Pesticide Programs, Office of Chemical Safety and Pollution Prevention, US Environmental Protection Agency, 3/28/2016. 34 pages.

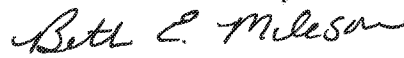
<sup>2</sup> Ritter, A.M. 2017. Aldicarb: Drinking Water Exposure Assessment. Unpublished report by Waterborne Environmental Inc. Study No.: 245.01. November 14, 2017. 22 pages. MRID 50549101.

<sup>3</sup> Milesen, B.E. 2017. Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessment for Proposed Uses. Unpublished report by Technology Sciences Group, Inc. Document No.: 20170230. December 28, 2017. 27 pages. MRID 50549102.

in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 24, 2018.

A handwritten signature in cursive script, appearing to read "Beth E. Miles".

---

Beth E. Miles

# Curriculum Vitae Beth E Milesen

## **Beth E. Milesen, Ph.D., DABT**

Technology Sciences Group Inc.

Washington, DC 20036

Phone: (202) 828-8956

email: bmilesen@tsgusa.com

## **EDUCATION**

MBA, George Mason University, Fairfax, VA, (2013)

PhD, Toxicology, University of North Carolina, Chapel Hill, NC (1989)

MS, Biology/Zoology, George Washington University, Washington, DC (1984)

BA, Biology, George Washington University, Washington, DC (1981)

## **PROFESSIONAL EXPERIENCE**

### **Technology Sciences Group Inc. (TSG)**

**2001 to Present**

*Technology Sciences Group Inc. is part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG), and provides state, federal and international expertise on a wide range of scientific and regulatory issues. With experts in regulatory affairs, chemistry, toxicology, environmental fate and risk assessment, TSG provides services in support of the development, registration, compliance and defense of chemically related products. Clients include chemical, pesticide, consumer product, food, personal care and animal health companies, as well as industry groups, trade associations, and law firms.*

### **Principal Scientific Consultant, Team Leader**

#### **Responsibilities include:**

- Create comprehensive toxicology and risk assessment strategies to inform clients' business decisions and achieve their regulatory goals;
- Design and conduct human health and ecological risk assessments to support product stewardship, registrations and certifications;
- Meet with federal and state officials and stakeholder groups to discuss and resolve scientific issues;
- Design toxicology testing programs and testing strategies to support new and existing products;
- Support TSG management and staff in scientific and administrative matters.
- Clients include large producers and marketers of consumer products, chemicals and pesticides, as well as a number of small businesses, biotech firms, and trade associations.

### **ARCADIS**

**2000 to 2001**

*ARCADIS is an international company that provides consultancy, design, engineering and management services in the fields of Infrastructure, Water, Environment and Buildings. With more than 22,000 employees and more than \$3.3B in revenues the company has an extensive international network that is supported by strong local market positions.*

## Curriculum Vitae Beth E Milesen

### Principal Scientist

#### Responsibilities included:

- Develop toxicological and human health risk assessments for site-specific and chemical-specific scenarios,
- Develop and maintain client relationships,
- Mentor junior staff.

### **ILSI Risk Science Institute**

**1996 to 2000**

*The International Life Sciences Institute (ILSI) is a nonprofit, worldwide organization whose mission is to provide science that improves public health and well-being. It achieves this mission by fostering collaboration among experts from academia, government, and industry on conducting, gathering, summarizing, and disseminating science. Its activities focus primarily on nutrition and health promotion; food safety; risk assessment; and the environment.*

### Senior Scientist

#### Responsibilities included:

- Design and implement programs to advance the scientific basis of risk assessment;
- Create proposals outlining goals and objectives, strategic plans and budgets necessary to complete projects;
- Collaborate with scientists from U.S. and international agencies and organizations including the U.S. Environmental Protection Agency, Food and Drug Administration and Organization for Economic Cooperation and Development;
- Direct and chair working groups composed of scientists from academia, industry, government and public interest groups and stimulate them to reach consensus on difficult scientific issues.

#### Projects included:

1. Develop principles to determine what constitutes a common mechanism of toxicity;
2. Develop guidance for the design and interpretation of studies to characterize acetylcholinesterase activity in the peripheral nervous system;
3. Develop a framework for cumulative risk assessment; and
4. Evaluate experimental methods to identify and characterize developmental neurotoxicity.

### **NC Department of Environment & Natural Resources**

**1992 to 1996**

*The North Carolina Department of Environment and Natural Resources (DENR) Division of Air Quality (DAQ) works to protect and improve outdoor, or ambient, air quality in North Carolina for the health, benefit and economic well-being of all. To carry out this mission, the DAQ operates a statewide air quality monitoring network to measure the level of pollutants in the outdoor air, develops and implements plans to meet future air quality initiatives, assures compliance with air quality rules, and educates, informs and assists the public with regard to air quality issues.*

### Toxicologist

#### Responsibilities included:

- Design, conduct, and interpret large-scale ambient sampling studies used to characterize concentrations of toxic air pollutants and assess citizen exposure and risk,
- Direct the DENR Secretary's Scientific Advisory Board on Toxic Air Pollutants (SAB),
  - Work with scientists from research institutions, universities, government and industry;
  - Identify toxic air pollutants (TAPs) of concern to North Carolina;

## Curriculum Vitae Beth E Milesen

- Conduct risk assessments for TAPs based on primary literature.

### **Projects included:**

1. Design and direct large-scale ambient monitoring studies to measure TAPs emitted by petroleum terminals, wood furniture manufacturing facilities and polyurethane foam producing facilities;
2. Assess potential human exposure to emissions from hazardous waste-burning incinerators, phosphate mining operations, petroleum terminals and furniture manufacturing facilities based on measured ambient levels and modeled concentrations of TAPs;
3. Prepare risk assessments and derive acceptable ambient levels (AALs) for many toxicants, including, allyl chloride, toluene diisocyanate, methylene chloride and formaldehyde.

### **Duke University Medical Center**

**1989 to 1991**

*Duke University has about 13,000 undergraduate and graduate students and a world-class faculty helping to expand the frontiers of knowledge.*

### **Research Associate, Department of Pharmacology and the Center for the Study of Aging**

#### **Responsibilities included:**

- Design and conduct behavioral, neurochemical and neuropharmacologic studies to determine toxicologic mechanisms involved in selective neuronal degeneration that occurs following transient forebrain ischemia, an animal model of stroke;
- Supervise undergraduate and graduate students and technical staff.

#### **Projects included:**

1. Complete three comprehensive studies on neuronal degeneration,
2. Publish the results in the peer-reviewed literature;
3. Fulfill postdoctoral training in sociology, physiology, cardiology, and disease in aging populations.

### **University of North Carolina- Chapel Hill**

**1985 to 1989**

*The University of North Carolina at Chapel Hill prides itself as the nation's first public university, serving North Carolina, the United States and the world through teaching, research and public service.*

### **Doctoral candidate, Curriculum in Toxicology in the Medical School of UNC – Chapel Hill**

#### **Responsibilities included:**

- Conduct research in Dr. Richard Mailman's Neurotoxicology Laboratory on the effects of toxicants on brain dopamine neurotransmission in rats;
- Train and supervise laboratory technicians.



**George Washington University**

**1980 to 1984**

*The George Washington University is located in the nation's capital and is an institution with a history of dedication to educating and preparing future leaders.*

**Master's degree candidate, Department of Biological Sciences**

- Conduct research in Dr. Randall Packer's laboratory to determine how acid-base balance in tropical land crabs is affected by changing environmental temperature;
- Teach human and advanced human physiology to undergraduate students.

**Undergraduate Student Researcher, Department of Biological Sciences**

- Conduct undergraduate research in the laboratory of Dr. John Burns, to determine the seasonal variation in the reproductive biology of tropical poeciliid fish in the absence of significant seasonal changes in day-length.

**CERTIFICATIONS**

Diplomate of the American Board of Toxicology, 1996; recertified: 2001, 2006, 2011, 2016

**PROFESSIONAL MEMBERSHIPS**

Society for Risk Analysis  
Society for Neuroscience  
Society of Toxicology  
American Association for the Advancement of Science

**INVITED PARTICIPANT IN WORKING GROUPS/TASK FORCES**

- **Workshop:** Risk Assessment Methodologies Workshop on Approaches to Weight of the Evidence Evaluation in Risk Assessment, ILSI Health and Environmental Sciences Institute, December 2006.
- **Working Group:** Food Safety in Europe: Risk Assessment of Contaminants in Food, **European Union Concerted Action and ILSI Europe**, January-October 2000
- **Workshop:** Threshold of Toxicological Concern, **ILSI Europe**, October 1999
- **Workshop:** The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- **Working meeting** for development of Total Risk Integrated Model, **U.S. EPA**, June 1996
- **Workshop:** Mechanism-based Toxicology in Cancer Risk Assessment: Implications for Research, Regulation and Legislation, **National Toxicology Program**, January 1995
- **Working Group:** Board of Scientific Counselors Ad Hoc Working Group to review the Criteria for Listing Carcinogens, **National Toxicology Program**, April 1995
- Task Force on Risk-Based Protocol for Determination of Soil and Water Clean-up Levels, **NC Department of Environment and Natural Resources**, 1995-1996

## Curriculum Vitae Beth E Mileson

- Ad Hoc Committee for Air Quality Standards **ACGIH**, 1995
- Air Toxics Committee member, **State and Territorial Air Pollution Program Administrators (STAPPA) and Association of Local Air Pollution Control Officials (ALAPCO)**, 1994-1996

### INVITED PRESENTATIONS

- *Cumulative Risk Assessment of OP Pesticides in the Diet based on a Probabilistic Method for Exposure Assessment.* at the Asia-Wide Symposium on Risk Assessment of Contaminants in Food, Seoul, South Korea, **Korea Food and Drug Administration**, November 1999
- *A Framework for Cumulative Risk Assessment* at the workshop: The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- *A Comparison of Three Methods to Cumulate Risk Due to Exposure to Multiple Chemicals that Act by a Common Mechanism of Toxicity.* **American Crop Protection Association**, December 1998
- *Common Mechanism of Toxicity, Report of the ILSI RSI Working Group.* **EPA FIFRA Scientific Advisory Panel**, 1998
- *Common Mechanism of Toxicity: A Case Study of OP Pesticides* **EPA OPP Pesticide Program Dialogue Committee**, 1998
- *Procedures and Functions of the Secretary's Scientific Advisory Board on Toxic Air Pollutants.* **NC Legislative Committee on Air Quality** 1996
- *Monthly Briefing* Air Quality Committee of the **North Carolina Environmental Management Commission**, 1995-1996
- *Investigation of Bulk Gasoline Terminals at Paw Creek, Mecklenberg County, NC.* **NC Legislative Environmental Review Committee**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation*, **Press Conference**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation*, **Public Meeting**, February 1994
- *Reconciliation of the NC Regulations for Control of Toxic Air Pollutants with the Federal Clean Air Act of 1990.* **NC Aggregates Association**, May 1993 and **Guilford County LEPC Industry Forum Meeting**, May 1993

### ADDITIONAL PROFESSIONAL ACTIVITIES

- Partner with ILSI Europe on **A European Commission Concerted Action** on Risk Assessment of Chemicals in Food and Diet, April, 2000-February 2001
- Organized and chaired a symposium on Cumulative Risk Assessment at the **Society for Risk Analysis Annual Meeting**, December 1999
- Nominated as a potential member of the **EPA FIFRA Scientific Advisory Panel** (declined due to participation in ILSI activities germane to issues considered by the SAP) October, 1997
- Member of the Editorial Advisory Board, **Reviews in Toxicology**, **IOS Press** (2001).

**FULL LENGTH REFEREED PUBLICATIONS**

1. Milesen, B.E., Packer, R.K., 1986. Hemolymph acid base balance in the terrestrial crab, *Gecarcinus ruricola*, with changing environmental temperature. **Comp. Biochem. Physiol.** 85A:4;715719.
2. Milesen, B.E., Schwartz, R.D., 1991. The use of locomotor activity as a behavioral screen for neuronal damage following transient forebrain ischemia in gerbils. **Neuroscience Letters** 128; 71-76.
3. Milesen, B.E., Lewis, M.H., Mailman, R.B., 1991. Dopamine receptor "supersensitivity" occurring without receptor up-regulation. **Brain Research**, 561; 1-10.
4. Schwartz, R.D., Yu, X., Wagner, J., Ehrmann, M., Milesen, B.E., 1992. Cellular regulation of the benzodiazepine/GABA receptor: arachidonic acid, calcium, and cerebral ischemia. **Neuropsychopharmacology**, 6; 119-125.
5. Milesen, B.E., Ehrmann, M.L., Schwartz, R.D., 1992. Alterations in the GABA-gated chloride channel following transient forebrain ischemia in the gerbil. **Journal of Neurochemistry**, 58; 600-607.
6. Lawler, C.P., Gilmore, J.H., Mooney, D.H., Mayleben, M.A., Atashi, J.R., Milesen, B.E., Wyrick, S.D., Mailman, R.B., 1993. A rapid and efficient method for the radiosynthesis and purification of [125I]SCH23982. **Journal of Neuroscience Methods**, 49; 141-153.
7. Milesen, B.E., Chambers, J.E., Chen, W.L., Dettbarn, W., Ehrich, M., Eldefrawi, A.T., Gaylor, D.W., Hamernik, K., Hodgson, E., Karczmar, A.G., Padilla, S., Pope, C.N., Richardson, R.J., Saunders, D.R., Sheets, L.P., Sultatos, L.G., Wallace, K.B., 1998. Common mechanism of toxicity: A case study of organophosphorus pesticides. **Toxicological Sciences**, 41; 8-20.
8. Milesen, B.E., Chambers, J.E., Ehrich, M., Hamernik, K., Hodgson, E., Reith, J.P., Saunders, D.R., Sheets, L.P., Sultatos, L.G., Van pelt, C., Wallace, K.B., 1999/2000 Common mechanism of toxicity: evaluation of carbamate pesticides. **Reviews in Toxicology**, 3; 127-138.
9. Milesen, B.E., Ferenc, S.A., 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment: overview. **Environmental Health Perspectives**, 109 (suppl 1); 77-78.
10. Cory-Slechta, D.A., Crofton, K.M., Foran, J.A., Sheets, L.P., Ross, J.F., Weiss, B., **Milesen, B.E.** 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment. II: behavioral considerations. **Environmental Health Perspectives**, 109 (suppl 1); 79-91
11. Dorman, D.C., Allen, S.L., Byczkowski, J.Z., Claudio, L., Fisher, J.E., Fisher, J.W., Harry, G.J., Li, A.A., Makris, S.L., Padilla, S., Sultatos, L.G., **Milesen, B.E.** 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment. III: Pharmacokinetic and pharmacodynamic considerations. **Environmental Health Perspectives**, 109 (suppl 1);101-111.
12. Edler L, Poirier K, Dourson M, Kleiner J, **Milesen B**, Nordmann H, Renwick A, Slob W, Walton K, Wurtzen G. 2002. Mathematical modeling and quantitative methods. **Food Chem Toxicol.** 40(2-3):283-326.

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13. Gargas M.L., Kinzell J.H., Milesen B.E. 2009. Foreword to a special issue of Inhalation Toxicology on a risk assessment for iodomethane. **Inhal Toxicol.** 21(05-07); 447.
14. Milesen B.E., Sweeney L.M., Gargas M.L., Kinzell J.H. 2009. Iodomethane Human Health Risk Characterization. **Inhal Toxicol.** 21(05-07); 583-605.

### BOOK CHAPTERS AND NONREFEREED PUBLICATIONS

1. Mailman, R.B., Milesen, B.E., Lewis, M.H., 1987. Neurotoxicity expressed through alterations of cell cell interaction. in: **Biochemical mechanisms and regulation of intracellular communication.** Princeton Scientific Publishing, Princeton, N.J. pp 97112.
2. Milesen, B.E., Hedrick, M., 1996. Evaluation of emissions from a bulk petroleum terminal cluster in Mecklenberg County, NC. **Air & Waste Management Meeting Proceedings, 1995 meeting.**
3. Milesen, B.E., 1996. Investigation of toxic air pollutants emitted by wood furniture manufacturing facilities in Caldwell County, North Carolina. **NC DEHNR Air Quality Investigation Report**
4. Milesen, B.E., 2001. Guest Perspective: EPA Pesticide Cumulative Risk Model Evolution Continues. **Risk Policy Report.** Volume 8 (10) 30-32.

### ABSTRACTS

1. Gatzky, J.T., Milesen, B.E., 1986. Permeability of excised rat urinary bladder and separation of the urothelium. **ASPET-SOT Abstract.**
2. Milesen, B.E., Lewis, M.H., Mailman, R.B., 1987. Regulation of dopamine receptor sensitivity: effects of 1-methyl-4-phenylpyridinium on priming. **Soc. Neuroscience Abstracts** 13; 27.20.
3. Lewis, M.H., Keresztury, M.F., Walker, Q.D., Cook, L.S., Milesen, B.E. Mailman, R.B., 1987. Diabetes-induced polydipsia in rats: dependence on intact dopamine function and mediation by central insulin. **Soc. Neuroscience Abstracts** 13; 67.13.
4. Milesen, B.E., Mailman, R.B., 1988. Disparate consequences of two distinct 6-hydroxydopamine (6-OHDA) brain lesions in rats. **The Toxicologist** Feb. 1988. Abstract
5. Milesen, B.E., Mailman, R.B., 1988. Comparison of behavioral and biochemical consequences of two distinct models of central dopaminergic denervation supersensitivity. **Soc. Neuroscience Abstracts** 14; 375.2.
6. Milesen, B.E., Mailman, R.B., 1989. Autoradiographic evaluation of D1 and D2 dopamine receptors following central dopaminergic denervation. **Soc. Neuroscience Abstracts** 15; 236.7.

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7. Milesen, B.E. and Schwartz, R.D., 1990. Effects of bilateral carotid occlusion (BCO) on GABA<sub>A</sub> receptor function in Mongolian gerbil brain. **Soc. Neuroscience Abstracts** 16; 385.14.
8. Ehrmann, M.L., Milesen, B.E., Edgar, P.P., Schwartz, R.D., 1990. Effects of bilateral carotid occlusion (BCO) on the GABA<sub>A</sub> receptor/chloride channel in Mongolian gerbil brain: autoradiography using <sup>35</sup>S-TBPS. **Soc. Neuroscience Abstracts** 16; 385.15.
9. Milesen, B.E., Olin, S.S., Foran, J.A., Julien, E., Barraja, L., Petersen, B., 1998. Methods for risk assessment of pesticides in the diet. **Soc. for Risk Analysis Abstracts** 30.05

# **ATTACHMENT 2**

## Letters from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida

The attached 11 letters were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the sworn affidavits that were submitted by these researchers and citrus growers.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC -- 10/16/17**

(Also see the sworn affidavit from Dr. Philip Stansly, dated 5/21/18)

*"There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane."*

**2. Walter T. Jerkins, President, Premier Citrus LLC -- 10/11/17**

(Also see the sworn affidavit from Walter T. Jerkins, dated 5/23/18)

*"Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus."*

**3. John Gose, General Manager, Lykes Bros. Inc -- 10/2/17**

(Also see the sworn affidavit from John Gose, dated 5/17/18)

*"We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc -- 9/28/17**

(Also see the sworn affidavit from William Roe, dated 4/27/18)

*"As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant*

*and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product."*

**5. Steve Ryan, President, Alico Citrus -- 10/10/17**

(Also see the sworn affidavit from Dave Owens, Director of Chemical Sales, Alico Citrus, dated 5/29/18)

*"As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product."*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 10/11/17**

(Also see the sworn affidavit from Tim Dooley, dated 5/17/18)

*"Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!"*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC – 11/3/17**

(Also see the sworn affidavit from Marvin Kahn, dated 5/xx/18)

*"We have had experience using Aldicarb in the past and have witnessed firsthand its positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods."*

**8. Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP – 10/20/17**

(Also see the sworn affidavit from Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP, dated 5/23/18)

*"I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers*



*who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials."*

**9. John Barden, Vice President, Barben Fruit Company Inc – 10/13/17**

(Also see the sworn affidavit from John Barden, dated 5/30/18)

*"Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid."*

**10. David Howard, Vice President Operations, Graves Brothers Company – 11/3/17**

*"Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control."*

**11. Keith Davis, Owner, Florida Fertilizer Company Inc -- 10/10/17**

*"Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements."*

Southwest Florida Research and Education Center  
2686 State Road 29 North  
Immokalee, FL 34142-9515

239-658-3400  
239-658-3469 Fax  
<http://swfrec.ifas.ufl.edu>

To: Antoine A. Puech, Managing Member, AgLogic Chemical LLC  
From: Dr. Philip A. Stansly, [pstansly@ufl.edu](mailto:pstansly@ufl.edu)  
Cc: Ron Hamel, Gulf Citrus Growers Association  
Date: 16 October 2017  
Subject: Re-registration of aldicarb

Dear Sir,

By means of this memo I would like to express my full support for the re-registration of Aldicarb in citrus. I am a research and extension entomologist working on citrus at this Center since 1989. My appointment is state wide with emphasis of the southwest growing regions which comprises about 25% of total citrus production in the state. During this time I have had considerable experience working with aldicarb, both pre and post greening (HLB) as you can see from the citations below. In my estimation aldicarb is an excellent product both in terms of efficacy as well as environmental and personal safety, thanks to the safeguards and stewardship actually in place.

There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane. Therefore, I urge that no effort be spared in registering aldicarb again for citrus in Florida and elsewhere in the US wherever citrus is grown. Please feel free to contact me for any additional information with respect to this issue.

Best Regards,

Digitally signed by Phil Stansly  
DN: cn=Phil Stansly, o=UF-IFAS, ou=SWFREC,  
email=pstansly@ufl.edu, c=US  
Date: 2017.10.16 11:58:17 -04'00'

Philip A. Stansly  
Professor of Entomology

**References cited:**

Stansly, P. A., and R. E. Rouse. 1994. Pest and yield responses of citrus to Aldicarb in a flatwoods grove. *Proceedings of the Florida State Horticultural Society* 107: 69-72.

Stansly, P. A., and R. E. Rouse. 1994. Pest and yield responses to Temik in southwest Florida's flatwoods - Year 2. *Citrus and Vegetable Magazine* 57: 6-7.

Croxtan, S. D., T. L. Stansly and P. A. Stansly. 2012. Timing of temik and movento applications for control of Asian citrus psyllid (ACP) *Diaphorina citri*, 2010. *Arthropod Management Tests*, 37: D1

Qureshi, J. A., and P. A. Stansly. 2008. Rate, placement and timing of aldicarb applications to control Asian citrus psyllid, *Diaphorina citri* Kuwayama (Hemiptera: Psyllidae), in oranges. *Pest Management Science* 64: 1159-1169.



P.O. BOX 690759  
Vero Beach, FL 32969

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 So Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech;

I am writing this letter with the intent to offer my full support as well as the full support of all of Premier's citrus related companies and clients in Florida for the re-registration of Aldicarb as a restricted use pesticide in Florida.

I currently serve as President of Premier Citrus and Premier Citrus Management, and together these companies have directly managed over 20,000 acres of citrus annually, in seven different Florida counties since 2005. Premier also operates one of the industry's largest fresh fruit packing houses, as well as one of the largest fresh citrus marketing companies. Prior to working with Premier, I managed the state's largest grove management company, Blue Goose Growers all the way back to 1980, including the Dole Citrus activities between 1983 and 2000.

My experience in crop management goes all the way back to 1975, but closer to 1980 when I first became actively involved and responsible for the selection and use of citrus pesticides. Since Aldicarb first became available in Florida, we used the product on practically all of our managed acres at the labeled rate due to the easiest of all metrics to track: higher earnings.

Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus.

Improved yields were most often a result of improved size, which always carries a premium in the fresh fruit business. That size improvement as well as overall blemish control was easily noticed in the packinghouse and drove more favorable size and quality packages, again driving up revenues for fresh fruit as well as juice fruit.

In fact, the product was so important to our annual production plan that actively participating in complying with the Stewardship program was a high company priority to insure

that by our safe use we could help the registrant keep the product available out into the future. It was a major disappointment when Bayer voluntarily pulled the label in 2010, and we believe strongly that its discontinued use and loss of the PGR and other effects coincided and contributed to both our company and the Florida industry yield decline as the additional pressure of ACP and HLB expanded and has contributed to this day.

Premier's current nucleus of excellent grove managers happen to be the remnants of one of the industry's largest Aldicarb applicators prior to 2010, and we have access to those same machines now. Together with those machines and experienced managers and applicators, Premier could be in the application business as quickly as anyone, as we have the weight of the grove financial base also pushing for this application capability.

The availability of Aldicarb will be a valuable offset to the nagging weak tree health that continues to suffocate our yields. HLB has the Florida industry on its heels, and with the last hurricane, it's fair to say we're desperate to obtain any tools that can even incrementally get us back to improved productivity and revenues to keep us in business.

Please keep up your best effort to obtain a registration by whatever means necessary, and consider Premier a strong supporter willing to help you at every turn.

Thank you for considering our need and our support of your pursuit of the use of Aldicarb for Florida citrus growers.

A handwritten signature in black ink, appearing to read "Walter T. Jerkins, Jr.", with a stylized flourish at the end.

Walter T. Jerkins, Jr.  
President, Premier Citrus, LLC  
625 66th Ave SW, 32968  
Vero Beach, Florida  
Ph: 772-469-1549, Mobile: 772-473-9754

# LYKES BROS. INC.

7 Lykes Road  
Lake Placid, FL 33852-9582



Telephone: (863) 465-4127  
FAX: (863) 465-2289

To: Antoine Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

October 2, 2017

Dear Mr. Puech,

My name is John Gose and I am the General Manager for Lykes Bros. Inc. Our company has been a major player in the citrus industry for many decades now. We have over 6,000 acres of active citrus land with various varieties of oranges for juice. We have been in a war against HLB for many years and time is running out for many growers. Just five short years ago we were at over 16,000 active citrus acres. The loss of over 10,000 acres is a direct result of citrus greening. The need is great to resurrect a product that will help us fight multiple pests as well as promote tree health and growth and increase fruit yields.

As a grower we used aldicarb in the past under the registered name of Temik. We are aware that aldicarb requires precise application and safety requirements and I can assure you we are prepared to follow the stringent program in our groves. The reinstatement of aldicarb in the citrus industry is crucial to our survival. We recently suffered major setback due to Hurricane Irma and that toppled with the constant pressure of Citrus Greening has many growers in a fight to stay in business. We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops.

John Gose,

A handwritten signature in black ink, appearing to read 'John Gose'.

General Manager

# Wm. G. Roe & Sons, Inc.

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SPECIALIZING IN FRESH TANGERINES, FRESH BLUEBERRIES AND CITRUS JUICES

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Noble  
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Red Deer  
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Blue Lake  
Tru-Tone  
Tru-Type  
Blu-Knight

To: Antoine Puech  
Managing Member AgLogic Chemical LLC  
121 South Estates Drive, Suite 101  
Chapel Hill, NC 27514

From: Bill Roe  
VP Operations Wm. G Roe & Sons Inc.  
Winter Haven, FL 33882

Date: September 28, 2017  
Re: AgLogic 15GG Aldicarb pesticide

Dear Mr Puech:

I am writing this letter in support of the re-registration of Aldicarb as a restricted use pesticide for use on Florida citrus.

Our company Wm G Roe & Sons is a long standing player in the citrus industry in Florida. We own manage or operate approximately 3,000 acres of citrus across various locations throughout the citrus belt. We have a diversified portfolio of varieties which range from Pomelo to Tangerines and our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are the leading shipper of tangerines in the state of Florida and our brand Noble is highly respected in retail and terminal markets. We had used Aldicarb in the form of Temik for many years during the decades of the 80's, 90's, and 2,000's.

At one point during the 90's we were certified commercial applicators in addition to using it on all of our own acreage for which it could be permitted.

As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product.

We recognize that Aldicarb requires a stringent stewardship program to insure its safe and appropriate application. Florida had implemented a rigorous stewardship program through its Dept of Agriculture during the prior application period which required prior site inspections, well set-backs, and application permits specific to site. For many years this program was successfully administered and has a legacy of providing the industry with a proven tool to enhance tree vigor, yield and fruit quality.

As an industry besieged with disease and recent bad weather luck we sorely need this product for use in our groves to offset the deleterious impacts of Greening.

Sincerely,





October 10, 2017

Antoine Puech  
Managing Member  
Aglogic Chemical LLC  
121 S Estates Drive Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

My name is Steve Ryan and I am the President of Citrus Operations for Alico. Our company grows 32,000 acres of citrus throughout Florida. We currently have 250 full time employees as well as several hundred contract laborers.

We have been battling Huanglongbing, aka citrus greening, for several years and have seen our production decline rapidly as a direct result of this disease. One of our primary weapons against the vectors of this disease was Aldicarb which we used until it was taken off the market in 2010. Now is the time to resurrect this product as a much needed tool in our battle to stop the devastating ravages of this disease.

We at Alico understand that this product requires diligent stewardship activities and are committed to ensuring this product is used in a safe and responsible manner. Our company has experience in using millions of pounds of Aldicarb for over 20 years without incident.

The damage caused by Hurricane Irma has only exacerbated our need to have this product available to us as soon as possible. We appreciate the efforts of Aglogic in bringing this product back to the citrus industry. Alico is committed to assisting you however we can in obtaining regulatory approval. It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications.

Thank you again for your efforts to get this product reinstated for the citrus industry. It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated.

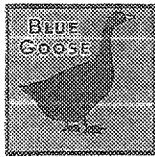
Sincerely,



Steve Ryan  
President

12010 E Hwy 70  
Arcadia, FL 34266





**Blue  
Goose  
Growers**

**Florida Grove and Crop Management L.L.C**

P.O. Box 14709  
Ft Pierce, FL 34979  
Phone (772) 461-3020  
Fax (772) 468-4669

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S. Estates Dr., Suite 101  
Chapel Hill, NC 27514

**RE: Aldicarb (Temik) Re-Registration**

Dear Mr. Puech:

As General Manager of Blue Goose Growers, a 10,000 acre citrus management company, located on the east coast of Florida, I fully support your effort to re-register Temik for use on citrus in Florida.

As you are aware, our industry is suffering and in need of every available tool to control the spread of citrus greening and make this industry viable again. Allowing Temik to be used again on citrus in Florida will once again allow us to have a familiar product, a product that works, to control the pests that carry diseases that threaten our citrus crops.

Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!

We all genuinely appreciate your effort to expedite this re-registration effort, and look forward to having Temik available for use.

Sincerely Yours,

  
Timothy J. Dooley  
VP/GM, BGG

## Antoine Puech

---

**From:** Marvin Kahn <mkahn@kahngrove.com>  
**Sent:** Friday, November 03, 2017 3:52 PM  
**To:** Antoine Puech  
**Cc:** mikes@flicitrusmutual.com; Andrew Meadows; Trevor Murphy  
**Subject:** Aldicarb

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Good afternoon Mr. Puech,

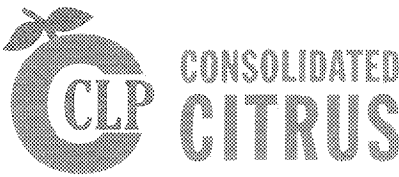
We are a third-generation citrus growing operation, with experience in the industry dating back to the 1930s when my father purchased his first orange grove. We have had experience using Aldicarb in the past and have witnessed firsthand it's positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods. Please let us know if there is anything we can do to assist you in this process.

If you have not heard from the five or so grower organizations CEO's , we or Mike Sparks and Andrew Meadows could help in this regard.

Regards,

Marvin Kahn  
Kahn Citrus Management, LLC  
Murphy Ag Solutions of the Heartland, LLC  
P.O. Box 3346  
Sebring, FL 33871  
863-381-0384 (Cell)  
863-385-6136 (Office)  
863-382-9737 (Fax)





10/20/2017

Michael Stewart, Manager  
Horticultural Services  
Consolidated Citrus LP  
63 Barn Rd.  
Venus, FL 33960

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

In my position as Manager – Horticultural Services for Consolidated Citrus LP, I am writing in support of AgLogic LLC's application to register AgLogic 15GG Aldicarb pesticide for use in citrus in the state of Florida. Consolidated Citrus has nearly 30,000 acres of citrus, making it one of the largest citrus production companies in Florida. I have used Aldicarb, as the branded product Temik, for many years under three different registrants, Union Carbide, Rhone Poulenc and Bayer Crop Science. I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials. If AgLogic 15GG Aldicarb is registered and priced right, Consolidated Citrus would very likely use it for both fresh and processed citrus fruit production. Thank you for your efforts to register this product.

Sincerely yours,

Michael Stewart, Manager  
Horticultural Services

63 Barn Road  
Venus, FL 33960

(p) 863-699-6090  
(f) 863-465-6837



October 13, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

Our company has been growing citrus in central Florida since the 1920's. The fifth generation has just joined us and expanded our farming operation to include blueberries. My two brothers and I manage the day to day farming activities personally meaning our boots are in the groves.

I am writing to support AgLogic Chemical LLC to pursue the registration for AgLogic 15GG Aldicarb for use in Florida citrus. For more than 20 years, Aldicarb (brand name Temik) was one of the most effective inputs to manage a broad range of citrus pests systemically in the tree. This resulted in substantial increases in fruit yields and quality as well as improved growth

The grower community is encouraged by your effort to get an Aldicarb product again registered in Florida citrus. Right now, growers are in the fight of their life against a disease known as HLB, or citrus greening. HLB is a vascular disease vectored by the Asian citrus psyllid (ACP). It is endemic to the state of Florida and it can kill a tree within two years. Our crop has shrunk by more than 66 percent since the onset of HLB.

No cure exists although a massive research effort over the past decade has made headway. Adding Aldicarb back to the toolbox will help slow the spread of the disease through an effective integrated management program. When Temik was registered in Florida citrus, growers followed an intensive stewardship program regulated at both the state and federal level. All application sites were monitored prior to the start of the approved application period. All wells at each site were identified, located, and flagged with a setback. The program clearly showed that Aldicarb can be used safely.

Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid.

Regards,

A handwritten signature in dark ink, appearing to read "John P. Barben".

John P. Barben  
VP, Robert J. Barben, Inc.  
VP, Barben Fruit Co., Inc.



November 3, 2017

Antoine A Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

I am writing this letter to offer my support, and the support of Graves Brothers Company, in the pursuit of re-registration of Aldicarb as a restricted use pesticide on Florida citrus.

Having been raised in Central Florida while working on family owned citrus properties, and as a graduate of The University of Florida Citrus Horticulture Program, I feel that my 30 years of citrus production experience qualifies me to encourage the return of Aldicarb (AgLogic 15GG) pesticide to the Florida Citrus Industry.

I currently manage the agricultural properties owned by Graves Brothers Company. GBC has been involved in Florida agriculture since the 1930's and currently owns and manages 9,000 acres of cattle, timber, vegetable, ornamental and citrus production in Florida. Over the last 70 years Graves Brothers Company has been heavily focused on all phases of the Florida Citrus Industry from nursery tree production through citrus harvesting, packing and sales.

We are struggling, as is the entire Florida Citrus Industry, with the bacterial disease Huanglongbing and its associated vector Asian Citrus Psyllid. The reduction in tree health brought on by this imported disease and its introduced vector has placed our entire industry on the precipice of collapse. Our industry is desperately in need of tools to combat this endemic disease.

Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control.

It is my understanding that Ag Logic 15GG will be labeled for application and use by the same Florida Rule (Rule 5E2.028) as in the past. The history of stewardship of Aldicarb by Florida Citrus Growers under these guidelines has proven that this product can be used safely and without any unacceptable environmental risk. The cadre of growers and applicators that were part of this successful history are more than capable of continuing this legacy in Florida citrus.

Please consider the needs of Graves Brothers Company and more specifically the needs of The Florida Citrus Industry as you endeavor to return this important tool to our diminished grower toolbox.

Sincerely,

David F Howard  
Vice President of Operations  
Graves Brothers Company  
2770 Indian River Boulevard, Suite 201  
Vero Beach, Florida  
Phone: 772.562.3886, Mobile: 772.473 9622

2770 Indian River Blvd; Suite 201, Vero Beach, Florida 32960-4230  
Phone (772) 562-3886 Fax (772) 562-3565  
[www://GravesBrothersCompany.com](http://www.GravesBrothersCompany.com)

ED\_002527\_00004587-00016

# FLORIDA FERTILIZER COMPANY, INC.

P.O. BOX 1087 • WAUCHULA, FL 33873-1087  
(863) 773-4159 • FAX # (863) 773-9363  
office@flfertilizer.com

October 10, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

My name is Keith Davis. I am a citrus grower, fertilizer and agricultural chemical supplier. I own approximately 175 acres of citrus, and make recommendations for many customers in the citrus industry.

I strongly support AgLogic efforts to register AgLogic 15GG for use on citrus in the state of Florida. As a citrus grower and chemical supplier, with almost 40 years of experience, I have seen firsthand what Aldicarb does for a citrus tree. Aldicarb makes it "Healthy"! Why? It reduces nematodes on the roots, and controls piercing and sucking insects. Aldicarb also increases pound solids of fruit, enables it to handle stress from cold weather, and should help trees survive and be able to withstand the effects of citrus greening (HLB) bacteria.

Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements.

AgLogic 15GG would be a great product to have for Florida citrus, to keep this great industry strong and viable.

Sincerely,



Keith Davis

Message

---

**From:** Baptist, Erik [Baptist.Erik@epa.gov]  
**Sent:** 8/14/2018 2:01:06 PM  
**To:** Keller, Kaitlin [keller.kaitlin@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]  
**Subject:** RE: Temik Response  
**Attachments:** Aldicarb SLN 8-6-2018 revised after meeting with AgLogic\_clean.doc

## Deliberative Process / Ex. 5

**Erik Baptist**  
Senior Deputy General Counsel  
Office of General Counsel  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
(202) 564-1689  
[baptist.erik@epa.gov](mailto:baptist.erik@epa.gov)

---

**From:** Keller, Kaitlin  
**Sent:** Monday, August 13, 2018 6:18 PM  
**To:** Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>  
**Subject:** FW: Temik Response

## Deliberative Process / Ex. 5

---

**From:** Keigwin, Richard  
**Sent:** Friday, August 10, 2018 9:27 AM  
**To:** Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>  
**Cc:** Keller, Kaitlin <keller.kaitlin@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Guilaran, Yu-Ting <Guilaran.Yu-Ting@epa.gov>; Pease, Anita <Pease.Anita@epa.gov>  
**Subject:** Temik Response

## Deliberative Process / Ex. 5

Rick Keigwin  
Director, Office of Pesticide Programs  
U.S. Environmental Protection Agency  
Phone: 703-305-7090  
Website: [www.epa.gov/pesticides](http://www.epa.gov/pesticides)  
Sent from my iPhone

Begin forwarded message:

**From:** "Keigwin, Richard" <[Keigwin.Richard@epa.gov](mailto:Keigwin.Richard@epa.gov)>  
**To:** "Baptist, Erik" <[baptist.erik@epa.gov](mailto:baptist.erik@epa.gov)>, "Messina, Edward" <[Messina.Edward@epa.gov](mailto:Messina.Edward@epa.gov)>  
**Cc:** "Beck, Nancy" <[Beck.Nancy@epa.gov](mailto:Beck.Nancy@epa.gov)>, "Bertrand, Charlotte" <[Bertrand.Charlotte@epa.gov](mailto:Bertrand.Charlotte@epa.gov)>  
**Subject:** RE: OPP General Agenda Item; Temik

## Personal Matters / Ex. 6

# Deliberative Process / Ex. 5

**From:** Baptist, Erik  
**Sent:** Thursday, August 09, 2018 10:53 AM  
**To:** Keigwin, Richard <[Keigwin.Richard@epa.gov](mailto:Keigwin.Richard@epa.gov)>; Messina, Edward <[Messina.Edward@epa.gov](mailto:Messina.Edward@epa.gov)>  
**Cc:** Beck, Nancy <[Beck.Nancy@epa.gov](mailto:Beck.Nancy@epa.gov)>; Bertrand, Charlotte <[Bertrand.Charlotte@epa.gov](mailto:Bertrand.Charlotte@epa.gov)>  
**Subject:** OPP General Agenda Item; Temik

Rick and Ed,

# Deliberative Process / Ex. 5

Thanks,

**Erik Baptist**  
Senior Deputy General Counsel  
Office of General Counsel  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
(202) 564-1689  
[baptist.erik@epa.gov](mailto:baptist.erik@epa.gov)



Message

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**From:** Keller, Kaitlin [keller.kaitlin@epa.gov]  
**Sent:** 8/13/2018 10:18:26 PM  
**To:** Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Baptist, Erik [Baptist.Erik@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]  
**Subject:** FW: Temik Response  
**Attachments:** Aldicarb SLN 8-6-2018 revised after meeting with AgLogic\_clean.doc; ATT00001.htm; ATT2.pdf; ATT00002.htm; ATT1.pdf; ATT00003.htm; 3588985\_1.pdf; ATT00004.htm

## Deliberative Process / Ex. 5

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**From:** Keigwin, Richard  
**Sent:** Friday, August 10, 2018 9:27 AM  
**To:** Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>  
**Cc:** Keller, Kaitlin <keller.kaitlin@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Guilaran, Yu-Ting <Guilaran.Yu-Ting@epa.gov>; Pease, Anita <Pease.Anita@epa.gov>  
**Subject:** Temik Response

## Deliberative Process / Ex. 5

Rick Keigwin  
Director, Office of Pesticide Programs  
U.S. Environmental Protection Agency  
Phone: 703-305-7090  
Website: [www.epa.gov/pesticides](http://www.epa.gov/pesticides)  
Sent from my iPhone

Begin forwarded message:

**From:** "Keigwin, Richard" <Keigwin.Richard@epa.gov>  
**To:** "Baptist, Erik" <baptist.erik@epa.gov>, "Messina, Edward" <Messina.Edward@epa.gov>  
**Cc:** "Beck, Nancy" <Beck.Nancy@epa.gov>, "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>  
**Subject:** RE: OPP General Agenda Item; Temik

## Personal Matters / Ex. 6

## Deliberative Process / Ex. 5

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**From:** Baptist, Erik

**Sent:** Thursday, August 09, 2018 10:53 AM

**To:** Keigwin, Richard <[Keigwin.Richard@epa.gov](mailto:Keigwin.Richard@epa.gov)>; Messina, Edward <[Messina.Edward@epa.gov](mailto:Messina.Edward@epa.gov)>

**Cc:** Beck, Nancy <[Beck.Nancy@epa.gov](mailto:Beck.Nancy@epa.gov)>; Bertrand, Charlotte <[Bertrand.Charlotte@epa.gov](mailto:Bertrand.Charlotte@epa.gov)>

**Subject:** OPP General Agenda Item; Temik

Rick and Ed,

# Deliberative Process / Ex. 5

Thanks,

**Erik Baptist**

Senior Deputy General Counsel

Office of General Counsel

U.S. Environmental Protection Agency

1200 Pennsylvania Ave., NW

Washington, DC 20460

(202) 564-1689

[baptist.erik@epa.gov](mailto:baptist.erik@epa.gov)

July 2, 2018

**BY ELECTRONIC AND OVERNIGHT MAIL**

Rick Keigwin, Director  
Office of Pesticide Programs  
USEPA Headquarters  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N. W.  
Washington, DC 20460-0001  
([keigwin.richard@epa.gov](mailto:keigwin.richard@epa.gov))

Nancy Beck, Deputy Assistant Administrator  
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([beck.nancy@epa.gov](mailto:beck.nancy@epa.gov))

Re: Critically Important Pesticide SLN to Help Embattled Florida Citrus Industry

Dear Sir and Madame:

This letter requests your – and the Agency’s – support for a FIFRA Section 24(c) Special Local Need registration (SLN) for AgLogic 15GG, a granular insecticide containing 15% aldicarb, to control Asian citrus psyllid, citrus rust mites, spider mites, aphids and nematodes on Florida citrus. The SLN application was filed with the Florida Department of Agriculture and Consumer Services (FLDACS) on June 1, 2018 by AgLogic Chemical, LLC, the sole U.S. registrant of aldicarb.

The key facts are these:

1. The Florida citrus industry is on “the brink of annihilation” (Dr. Phillip Stansly, Professor of Entomology, U. Fl., 10/16/17 Letter). It has been ravaged by the citrus greening disease (HLB), transmitted by the Asian citrus psyllid (ACP), and there has been an **80% loss** in production of citrus statewide.<sup>1</sup>
2. Florida growers are losing the battle against the spread of citrus greening disease. At best, the current toolbox of chemical treatments only modestly retards the advance of the disease, but does nothing to improve production. As stated by one grower: “Absent better tools citrus growers will be out of business soon!” (Tim Dooley, Vice President and General Manager, Blue Goose Growers, LLC, 10/11/17 Letter). The intensive use of foliar treatments to fight psyllids has also resulted in other pest problems, including the development of resistance as well as spikes in mite, weevil, and aphid populations.

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<sup>1</sup>. At the time HLB was first discovered in 2003-2004, Florida orange production totaled 242 million boxes. In April 2018, the USDA National Agricultural Statistics Service estimated that just 45 million boxes of oranges would be harvested in 2017-2018 – a decrease of 197 million boxes, or 81%. USDA/NASS, Citrus April Forecast 2017-2018 Season (April 10, 2018) *available at*: [https://www.nass.usda.gov/Statistics\\_by\\_State/Florida/Publications/Citrus/Citrus\\_Forecast/2017-18/cit0418.pdf](https://www.nass.usda.gov/Statistics_by_State/Florida/Publications/Citrus/Citrus_Forecast/2017-18/cit0418.pdf).

3. *The Florida citrus industry – including the largest growers in the state – enthusiastically support an SLN registration for AgLogic 15GG.* Indeed, several prominent growers have taken the unusual step of submitting both signed affidavits (Attachment 1) and letters (Attachment 2) detailing why they so urgently need aldicarb.<sup>2</sup> As they explain, a unique attribute of aldicarb is that it stimulates tree health and root growth and ***markedly increases fruit size and yield***, precisely what growers need now to stay in business. Aldicarb is also effective against many pests, including psyllids, mites and nematodes, among others. As one grower has testified: “Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.” (John Gose, General Manager, Lykes Bros. Inc.; 5/17/18 Affidavit).
4. Florida citrus growers are familiar with aldicarb because they used the product (under the trade name, TEMIK 15G) with great results for several decades (~1978-2010), until Bayer, the sole registrant, *voluntarily* cancelled the registration and withdrew from the market, pursuant to a well-publicized corporate decision to exit all WHO Class 1 products.
5. FLDACS has advised AgLogic that it will not approve the SLN unless it is assured that EPA will not disapprove it. It is our understanding that EPA has not yet had the opportunity to review the SLN, attached affidavits and other materials demonstrating the Special Local Need for aldicarb. However, we also understand that there have been early indications by staff members in EPA’s OPP that OPP is inclined to ***deny*** the SLN.

We submit that OPP’s current disinclination to approve the SLN is unjustified and contrary to the public interest. The following points may clarify why we believe this:

6. At the time Bayer cancelled its aldicarb registrations, EPA was concerned about possible dietary risks to infants and children from consumption of food and drinking water containing aldicarb residues. For this reason, AgLogic’s subsequently-obtained registration for AgLogic 15GG, which is approved for use on cotton, peanuts and certain other crops, did not include use on citrus.
7. Over the past several years, aldicarb has undergone Registration Review. During this process, AgLogic implemented significant changes to the product label that result in aggregate dietary exposures to aldicarb well below the 2010 EPA Level of Concern. EPA has recently issued an Interim Registration Review Decision concluding that aldicarb may continue to be registered.
8. To assist the Agency in its assessment of aldicarb, including for use on citrus under a Florida SLN, AgLogic commissioned Dr. Beth Mileson, Principal Scientific Consultant, TSG Consulting, to conduct an acute dietary exposure and risk assessment for aldicarb.

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<sup>2</sup> For convenience, each attachment also includes a cover sheet highlighting relevant excerpts from the affidavits and letters, respectively.

This risk assessment was submitted to EPA earlier this year. Dr. Milesen's affidavit (included in Attachment 1) affirms that she conducted the risk assessment using models and methods identical to those used by EPA's risk assessors. The risk assessment demonstrates that 20% of the US citrus crop may be treated with aldicarb and dietary exposures (including food and water) for all sub-populations are well below any level of concern.

In short, there is no scientific basis for EPA to disapprove the SLN due to dietary risk.

\* \* \*

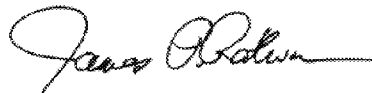
In summary, this SLN is critically important to a Florida citrus industry that desperately needs help. We urge you to take the steps necessary to ensure that OPP makes a full and fair assessment of the SLN, including its substantial benefits to American growers and consumers.

Time is of the essence. Application of AgLogic 15GG must occur during the dry season, which runs from mid-November through April at the latest. Even after the SLN is approved, several additional steps must be taken before applications can occur. Most important, AgLogic must identify applicators that have (or are willing to purchase) the necessary application equipment, and these applicators must be trained to ensure compliance with AgLogic's product stewardship program. Applicators must also petition FLDACS for permission to apply the product. Aldicarb has not been used on citrus since 2011, so considerable lead time is required to restart applications.

In furtherance of the process, AgLogic requests the opportunity to meet with the Agency as soon as possible to discuss the SLN and respond to any questions or concerns OPP may have. Depending on schedule, it is likely that one or more citrus growers and FLDACS officials will attend the meeting as well.

Thank you in advance for your attention to this important matter. Please do not hesitate to contact us if you have any questions or would like to discuss these issues further.

Sincerely,



James P. Rathvon  
Cristen S. Rose  
Counsel for AgLogic Chemical, LLC

Attachments

cc (by email and overnight mail):  
Richard Gebken, OPP  
Tawanda Maignan, OPP  
Antoine Puech, President/CEO of AgLogic



# **ATTACHMENT 1**

## **Affidavits from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida**

The attached 10 sworn affidavits were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the letters of support that were submitted by these researchers and citrus growers in late 2017.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC – 5/21/18**  
(Also see letter of support from Dr. Philip Stansly, dated 10/16/17)

*Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”*

*One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.*

*Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.*

**2. Walter T. Jerkins, President, Premier Citrus LLC – 5/23/18.**  
(Also see letter of support from Walter T. Jerkins, dated 10/11/17)

*Aldicarb is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.*

*Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.*

*The yield response from the use of aldicarb is robust, resulting in a sustained yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.*



*The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity - precisely the effects that are so desperately needed now by the citrus industry.*

**3. John Gose, General Manager, Lykes Bros. Inc – 5/17/18**  
(Also see letter of support from John Gose, dated 10/2/17)

*Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.*

*A serious drawback of foliar insecticides is that they can wipe out pollinators and other "beneficials" (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.*

*In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly higher pounds of solids per box, producing a very positive net economic return.*

*The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc – 4/27/18**  
(Also see letter of support from William Roe, dated 9/28/17)

*Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest*

*management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.*

*This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both - suppress psyllids and protect beneficials during bloom time - because of its systemic mode of action.*

*Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.*

**5. Dave Owens, Director of Chemical Sales, Alico Citrus -- 5/29/18**

(Also see letter of support from Steve Ryan, President, Alico Citrus, dated 10/10/17)

*Alicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides*

*The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.*

*Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 5/17/18**  
(Also see letter of support from Tim Dooley, dated 10/11/17)

*Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.*

*In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.*

*In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC -- 5/xx/18**  
(Also see letter of support from Marvin Kahn, dated 11/3/17)

*Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better - and are healthier - than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.*

*Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.*

*Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.*

**8. Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP -- 5/23/18**  
(Also see letter of support from Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP, dated 10/20/17)

*When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.*

*The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.*

**9. John Barden, Vice President, Barben Fruit Company Inc – 5/30/18**

(Also see letter of support from John Barden, dated 10/13/17)

*The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ACP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.*

*A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.*

*We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficial when we used aldicarb.*

**10. Dr. Beth Milesen, Principal Scientific Consultant, TSG Consulting – 5/24/18**

*The modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure. Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.*

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF PHILIP A. STANSKY, Ph.D.**

I, Philip A. Stansky, do solemnly swear as follows:

1. I am Professor of Entomology at the University of Florida (UF), Southwest Florida Research and Education Center, 2686 State Road 29 North, Immokalee, FL 34142. I joined UF in 1986, and moved to the Immokalee location in 1989.

2. I hold a Ph.D. in Entomology from Texas A&M (1985), an M.S. in Zoology from the University of Oklahoma (1978), and a B.S. in Zoology from Wayne State University (1967).

3. I am a research and extension entomologist focused on the integrated management of pests affecting major crops grown in southwest Florida, with emphasis on citrus and vegetables. I am the lead author or co-author of more than 538 scientific publications and 158 extension publications in my field, including 172 peer-reviewed articles. I am also the editor of a book and author of 9 book chapters relating to pest management.

4. I develop and test integrated systems of economic and sustainable pest management and their component tactics. I consult with members of the agricultural community, and provide information, training and diagnostic services in collaboration with county and multi-county agents.

5. A key focus of my work for the last 13 years has been and remains the citrus greening disease or huanglongbing (HLB), transmitted by the Asian citrus psyllid (ACP)

*Diaphorina citri*. My work is multifaceted and has included research on the use of aldicarb to control ACP and other citrus pests and to improve citrus yields.

6. Aldicarb (brand name, Temik) was registered for use on citrus in Florida for nearly 30 years until Bayer voluntarily cancelled all of its aldicarb registrations and exited the business at the end of 2010. Subsequently, AgLogic Chemicals, LLC obtained an EPA registration for an aldicarb product similar to Temik, called, AgLogic 15G, labeled for use on several crops not including citrus. AgLogic 15 G was subsequently approved in 2017 for use in Florida on peanuts and cotton by the Florida Department of Agriculture and Consumer Services.

7. I am aware that, at the request of numerous citrus producers, AgLogic Chemicals LLC applied to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG for use on citrus in Florida.

8. In a letter dated October 16, 2017 (attached), I expressed support for this SLN registration in the strongest possible terms. As stated in my letter: “It may not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida’s iconic citrus industry.” Accordingly, I urged that “no effort be spared in registering aldicarb again for citrus in Florida.”

9. I write this Affidavit to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida today.

10. Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”

11. Aldicarb is applied to the soil where it is absorbed by the tree roots and works systemically. As a result, aldicarb provides continuous pest control over an extended period of time, on the order of 90-120 days. At the same time, aldicarb is known to increase root growth, which promotes greater tree health and can lead to larger and more abundant fruit. Our research

cited below from a large scale replicated experiment in a commercial orange grove confirmed increased yield from trees treated with aldicarb. Stansly, P. A., and R. E. Rouse. 1994.

Pest and yield responses of citrus to aldicarb in a flatwoods grove. Proceedings of the Florida State Horticultural Society 107: 69-72.

12. Aldicarb applied through granular applicators below the soil surface has well established integrated pest management and environmental advantages over pesticides that are repeatedly applied through foliar sprays. AgLogic 15 G aldicarb is directly applied into the soil where it is absorbed by the roots, and works systemically against a broad range of pests. As a result, it does not have the same adverse impact as many foliar insecticide sprays on pollinators and other “beneficials” (*e.g.*, wasps, lady beetles, lace wings, and spiders) – which are key to effective integrated pest management programs. The safeguards and stewardship programs that have been adopted over the years for aldicarb provide additional assurance that aldicarb can be used on citrus safely and effectively without harming human health or the environment.

13. The insecticides currently available to citrus growers are, for the most part, applied by ground or aerial spray which may be repeated every 3-4 weeks. Rain events – which are not infrequent during the growing season in Florida – can rapidly wash away these residues, further reducing efficacy. In contrast, once aldicarb is absorbed by the tree roots it will remain active for several months.

14. One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.

15. Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.

16. Another problem faced by citrus growers today is citrus canker. To control canker, growers typically apply a copper-based fungicides at regular intervals. Unfortunately, copper inhibits beneficial mites that control rust mites. As a result, rust mites are a significant problem in many citrus groves where copper has been applied to combat canker. Again, aldicarb is highly effective in providing residual control of rust mites reducing the need for additional sprays.

17. As I noted in my support letter, Florida's iconic citrus industry is in a life or death struggle with HLB for survival. Growers face a host of pest problems, most importantly ACP/HLB, but also rust mites, canker, nematodes, aphids, and others. Hurricane Irma has only exacerbated the difficulties growers now face. In these dire circumstances, growers need more and better management tools, particularly in the face of growing ACP resistance to the neonicotinoids. Aldicarb – a carbamate with a different mode of action– has a proven track record with the Florida citrus industry by providing broad control of psyllids and other important pests while enhancing root growth and fruit production. For all these reasons, I urge the Department to approve an SLN registration for AgLogic 15GG.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on 21 May 2018.

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Philip A. Stansly, Ph.D.



**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF WALTER T. JERKINS, JR.**

I, Walter T. Jerkins, Jr., do solemnly swear as follows:

1. I am the President of Premier Citrus and Premier Citrus Management, 635 66<sup>th</sup> Ave. SW, Vero Beach, FL, 32968.

2. Premier is among the largest citrus producers in Florida, managing over 20,000 acres of citrus groves, located in seven (7) counties in Florida. Premier's fresh fruit package house also is one of the largest in Florida.

3. I have more than 40 years of experience in the citrus industry. After graduating from the University of Florida with a major in agriculture in 1975, I worked for about four (4) years at Southern Fruit Distributors, a Florida grower/processor. In 1980, I joined Blue Goose Growers, one of the state's largest grove management company, where I worked for more than 32 years. In 2013, I joined Premier as its President.

4. I am a founding member of Citrus Research and Development Foundation, Inc. (CRDF) and was its first President, a position I held for nine years (2011-Jan. 2018). The CRDF is headed by a 13-member Board of Directors that includes individuals from industry, academia, and government. The CRDF raises money and issues research grants to help companies develop products to combat citrus greening disease (HLB). Through my involvement in CRDF and knowledge of its research, I am well informed about the pest control products currently available

to the citrus industry and products still in the development pipeline. Aldicar is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.

5. I am not aware of any other single product or combination of products that provides the same yield improvement potential to the industry that aldicarb could provide, as discussed below.

6. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.

7. Premier enthusiastically supports AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 11, 2011 (attached), I affirmed Premier's strong support for this SLN registration.

8. The purpose of this Affidavit is to provide further explanation why aldicarb is urgently needed by citrus growers.

9. I have many decades of experience with the use of aldicarb on citrus. During the three decades that I was with Blue Goose Growers, we regularly used aldicarb (Temik) in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently had very positive experiences with aldicarb, which we regarded as a key tool in our arsenal to control insect pests and promote tree growth and fruit production. Year after year we found that when we used aldicarb, trees were healthier and more productive.

10. Premier also used aldicarb very regularly on virtually all of its citrus acres during the many years it was available. Based on my surveying of our grove managers here, Premier's positive experiences with aldicarb were very similar to those of Blue Goose Growers.

11. I have had discussions about aldicarb with many other growers in the industry over the years, including while I was CRDF President. The nearly universal consensus among citrus

producers is that aldicarb is a uniquely valuable product that offers a combination of benefits not provided by any other product or combination of products.

12. Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.

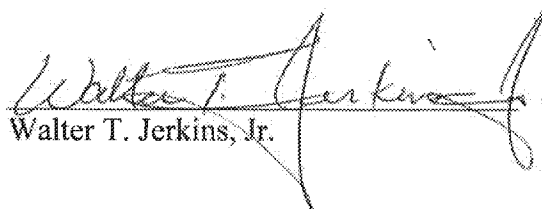
13. The yield response from the use of aldicarb is robust, resulting in a *sustained* yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.

14. The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity – precisely the effects that are so desperately needed now by the citrus industry.

15. For all these reasons, Premier urges the Department in the strongest possible terms to approve AgLogic’s application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.

  
Walter T. Jerkins, Jr.

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF JOHN GOSE**

I, John Gose, do solemnly swear as follows:

1. I am General Manager for Lykes Bros, Inc., 7 Lykes Road, Lake Placid, FL, 33852.
2. Lykes Bros a long-time major player in the Florida citrus industry. We have over 6,000 acres of active citrus groves. Over the last five years we have lost 50% of our citrus acreage due to Citrus Greening.
3. I have more than 40 years of experience in the citrus industry. My family owned citrus groves and I worked in those groves as a teenager. After I graduated from the University of Florida with a degree in agriculture/fruit crops in 1981, I accepted a position at Lykes Bros. I have worked at Lykes Bros in citrus management my entire career.
4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
5. We at Lykes Bros enthusiastically support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 2, 2011 (attached), I affirmed Lykes Bros' strong support for this SLN registration. As stated in my letter: "aldicarb ... is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."

6. The purpose of this Affidavit is to provide further explanation why citrus growers need aldicarb back in their toolbox.

7. Lykes Bros regularly used aldicarb (Temik) in citrus groves we managed for more than two decades, until it was voluntarily withdrawn from the market by Bayer in 2010. We consistently had very positive experiences with aldicarb. Based on our experiences, we consider aldicarb a uniquely valuable product that offers a combination of benefits not provided by any other registered product or combination of products.

8. Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.

9. A serious drawback of foliar insecticides is that they can wipe out pollinators and other “beneficials” (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.

10. In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly *higher pounds of solids per box*, producing a very positive net economic return.

11. The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root

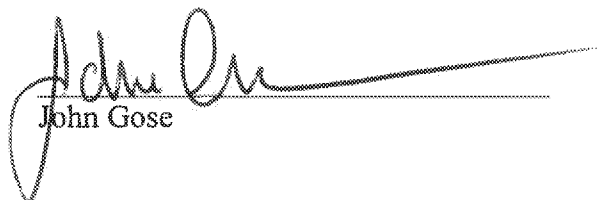
system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.

12. Another serious pest problem associated with citrus production in our groves is root weevils. Citrus greening disease interferes with the transport of sugars and other nutrients from the leaf canopy to the roots through the phloem. To compensate for this, we add nutrients to the soil to help feed the root system. Doing this, however, also supports root weevils (and nematodes). It is not an overstatement to say that root weevils are now a huge problem for Lykes Bros. Aldicarb is needed to combat this problem. When we were able to use aldicarb, we had few problems with root weevils. Root weevil larvae need moisture to come up from the soil and start feeding on the roots. When it was available, we applied aldicarb to soil in November and December. This application timing was perfect for knocking out root weevils before the next fruiting season.

13. For all these reasons, Lykes Bros urges the Department in the strongest possible terms to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 17, 2018.

  
John Gose

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**AFFIDAVIT OF WILLIAM G. ROE II**

I, William (Bill) G. Roe II, do solemnly swear as follows:

1. I am Vice President and Chief Operating Officer for Wm. G. Roe & Sons, Inc. My family has worked in the citrus industry for nearly a century. Wm. G. Roe & Sons, Inc., founded by my grandfather in 1927, is a long-standing player in the Florida citrus industry. We own, manage, or operate approximately 3,000 acres of citrus in various locations across the citrus belt. Our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are perennially one of the top 10 packers in the state. We are also the leading shipper of tangerines in Florida and our brand, Noble, is highly respected in the markets. We have the only private citrus plant breeding program in Florida, which specializes in tangerines.

2. I have more than 40 years of experience in the citrus industry. After graduating from Vanderbilt University in 1975, and taking courses in citriculture at Lake Alfred Citrus Research Station, FL, I began working full-time at Wm G. Roe & Sons in 1976. Prior to that, I worked part-time as a tractor driver and mechanic at the company, starting when I was in high school. I have held several positions at the company, from grove area manager to eventually production manager, a position I held for nearly 20 years. I also worked as our packing house manager for 10 years.

3. I served as President of the Florida Citrus Managers Association from 1986-87, and after appointment to the Florida State PRC, was its Chairman in 1996.

4. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. As stated in my letter dated September 28, 2017 (attached), Wm. G. Roe & Sons strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.

6. Today in Florida we have the benefit of a host of new insecticide chemistries for topical application through spraying. At the same time, Florida has been beset with the citrus greening disease (HLB,) which has manifested itself in a most virulent fashion. Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.

7. This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are



prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both – suppress psyllids and protect beneficials during bloom time – because of its systemic mode of action.

8. While the discussion in the previous paragraph focuses on psyllids, the same point applies to the various members of the scale family, mealybugs, and to some degree leaf miners. Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.

9. A phenomena of the past 12 years since citrus Canker has become endemic in the state has been the necessity of spraying copper every 21 days to control Canker lesions on the peel of many varieties. Canker lesions allow secondary infections to occur in the wounds of the fruit's peel, eventually causing the fruit to drop from the tree, so its control is mandatory for commercial growers. Although we have Streptomycin permitted for topical application and which helps, its application does not allow reduced applications of copper during the growing season. On the down side, application of copper creates a favorable micro-climate for mites to harbor on the peel of the fruit, making them quite difficult to control. When the fruit is quite susceptible during the late spring to Canker, the weather is generally hot and dry, which is perfectly suited for mite build-up even without copper deposits on the surface of the leaves and fruit. Aldicarb provides excellent mite control for an extended period during the spring, is not intrusive to either beneficials or honeybees, and accordingly was one of the reasons why most of the fresh fruit industry used aldicarb when it was available.

10. Another important reason why aldicarb is need by citrus growers today is that it promotes tree health and fruit production – what growers have called a PGR (plant growth regulatory) effect. It is hard to quantitatively assess aldicarb's PGR effect for citrus, but its use causes fruit to have enhanced high peel color and both measurably larger and more uniform size. It could be the combination of aldicarb negating the feeding and sucking of plant bugs and its impact on reducing the nematode population simultaneously, but in any case it is the only chemistry I have used in my 42 years in the industry which enhances the tree's performance and which unquestionably enhances the value of the fruit produced.

11. As growers, we are constantly trying to compensate for the much diminished root system caused by HLB by providing additional fertilizer and nutritional elements. Correspondingly, we are having to apply more foliar copper and leaf nutrients which are exacerbating mite populations. Aldicarb would be a most useful tool for the grower community and the environment by virtue of its providing enhanced control of a broad range of pests while enabling the grower to reduce topical pesticides.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April, 27 2018.

  
William (Bill) G. Roe II

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**AFFIDAVIT OF DAVID OWENS**

I, David Owens, do solemnly swear as follows:

1. I am the Director of Chemical Sales for Alico Citrus, 12010 Hwy 70, Arcadia, FL, 34266. I have held this position since the end of 2015. My responsibilities at Alico include purchasing from, and liaising with, suppliers of pesticides, fertilizers, and other chemical products for use in citrus.

2. Alico, based in Fort Myers, FL, is among the largest citrus growers in the United States, with some 32,000 acres of citrus groves. In 2017, Alico was the country's largest citrus producer, producing 7.6 million boxes of fruit.

3. Prior to joining Alico, I worked in sales for Rhone Poulenc, and its corporate successors, Aventis and Bayer, for more than 20 years. During this time, I was responsible for the largest sales territory in Florida for the product, Temik, containing aldicarb. My work included talking with growers, interfacing with extension service scientists, and dealing with issues relating to registration, product application, stewardship and other matters. Overall, I have more than 35 years of experience with the citrus industry.

4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. We at Alico strongly support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 10, 2017 from Steve Ryan, President of Citrus Operations (attached), Alico affirmed its support for an SLN registration for aldicarb for citrus. As stated in that letter: "It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications. .... It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated."

6. I and Alico stand by these statements in the October 10, 2017 letter. The purpose of this Affidavit is to explain further why aldicarb is urgently needed by citrus growers, as it fills a need not met by any other product, or combination of products, currently available.

7. Alico has a long, positive history with aldicarb. Alico regularly used aldicarb (Temik) in its citrus groves for at least 20 years, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. Alico's very favorable experiences with aldicarb that spanned decades are the foundation for its strong support for an SLN registration for aldicarb.

8. Aldicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree

growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides.

9. No other product on the market has the same positive effects on tree health and fruit production that Alico – and many other citrus growers – have obtained with the use of aldicarb. During the years Alico used Temik/aldicarb, it realized a very favorable return on its investment in the use of the product year after year.

10. The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.

11. Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.

12. Although there are other products that are labeled for psyllid control, Alico has found that the efficacy of these products for psyllid control has plateaued in recent years. There is great concern at Alico and in the industry that resistance to these chemistries, particularly “neonics” such as imidacloprid, is growing. This is another reason why aldicarb is urgently needed at this time. Aldicarb, a carbamate class pesticide, provides a different mode of action and its use would greatly assist in managing psyllid resistance.

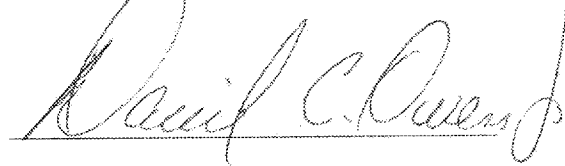
13. Aldicarb also provides well established environmental benefits. Because it is injected into the soil, it poses far less risk of harm to pollinators and other non-target beneficial insects than alternatives that are applied by foliar spray. The ability to use aldicarb would materially reduce the number of foliar applications of pesticides needed to control early season psyllids, and rust mites, greatly reducing the potential adverse impacts of harsher sprays on

beneficials and the environment. Aldicarb also has a much longer residual effect because it is distributed under the soil, and works best in wet soil. In contrast, foliar applications wash out in Florida's frequent rains and have to be repeated more often. It is fair to say that aldicarb is unique when it comes to controlling pests, while also increasing tree vigor and yields. There are also well established benefits of aldicarb on young trees. Aldicarb gives increased root flushes, and promotes the growth of young non-bearing and bearing trees.

14. For all these reasons, I urge the Department to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 29, 2018.

A handwritten signature in dark ink, appearing to read "David C. Owens", written over a horizontal line.

David Owens

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF TIMOTHY J. DOOLEY**

I, Timothy J. Dooley, do solemnly swear as follows:

1. I am the Vice President and General Manager of Blue Goose Growers, a citrus grove and crop management company based in Ft. Pierce, Florida. I have worked for Blue Goose Growers for approximately 27 years.
2. Blue Goose Growers manages approximately 10,000 acres of citrus trees.
3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
4. As stated in my letter dated October 11, 2017 (attached), Blue Goose Growers strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.
5. Citrus growers in Florida, including groves under Blue Goose Growers' management, have a long history of using aldicarb (Temik) successfully to control pests and threaten Florida's citrus crops.

6. Since aldicarb was removed from the market, the health of the Florida citrus industry has declined immensely. HLB is ravaging the industry, and growers are suffering from declining tree health and decreased fruit size and yield.

7. Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.

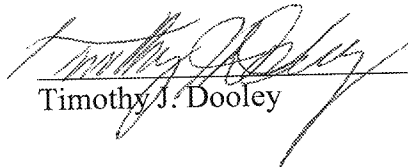
8. In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.

9. In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often.

10. There is no product or combination of products available to citrus growers today that offers the benefits of aldicarb. In addition to the longer residual control it provides, it is critically needed because it controls a wide range of pests, enhances tree health, and increases fruit production.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May, 17, 2018.

  
Timothy J. Dooley



**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF \_\_\_\_\_) )  
Application of AgLogic Chemicals, LLC \_\_\_\_\_) )  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_) )  
Registration for \_\_\_\_\_) )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_) )  
\_\_\_\_\_)

**AFFIDAVIT OF MARVIN KAHN**

I, Marvin Kahn, do solemnly swear as follows:

1. I am the primary owner of Kahn Citrus Management (KCM), based in Sebring, FL. KCM manages thousands of acres of citrus in Polk, Highlands, Hardee and DeSoto counties, FL.
2. My father entered the citrus industry when he purchased his first orange grove in the 1930s. I have been a part of the citrus industry my entire working life, and have more than 60 years of experience in citrus management. (I just celebrated my 85<sup>th</sup> birthday.)
3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
4. As stated in my letter dated November 3, 2017 (attached), we at KCM fully support AgLogic's SLN application. Our support for this SLN registration is based on decades of favorable experiences that we have had with aldicarb (Temik), up until the end of 2010, when it was voluntarily withdrawn from the market by Bayer.
5. The purpose of this Affidavit is to explain further why aldicarb is so urgently needed by KCM and other citrus growers in Florida.
6. Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including

nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better – and are healthier – than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.


7. Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.

8. Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.

9. In summary, if aldicarb were available, growers would be able to control psyllids, rust mites, and other pests with fewer foliar sprays involving harsher chemistries. Overall, trees would be healthier and more productive, and there would be less damage to honeybees and other beneficials.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April \_\_, 2018.

  
\_\_\_\_\_  
Marvin Kahn

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF \_\_\_\_\_) )  
Application of AgLogic Chemicals, LLC \_\_\_\_\_) )  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_) )  
Registration for \_\_\_\_\_) )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_) )  
\_\_\_\_\_)

**AFFIDAVIT OF CODY LASTINGER**

I, Cody Lastinger, do solemnly swear as follows:

1. I hold the position of Manager – Horticultural Services for Consolidated Citrus, LP (“Consolidated”), 63 Barn Road, Venus, FL 33960. Consolidated is among the largest citrus producers in the United States, with some 30,000 acres of citrus groves.

2. I graduated from the University of Florida in 2013 with a Master’s in Agronomy and Weed Science. I received a second Master’s in Aquatic Plant Management from the University of Florida Gainesville in 2017. I became Manager – Horticultural Services at Consolidated very recently, after the former long-time Manager, Michael J. Stewart, recently retired.

3. I am aware that AgLogic is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG aldicarb pesticide for use on citrus in Florida.

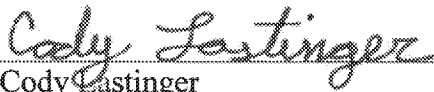
4. In a letter dated October 20, 2017 (attached), former manager Michael Stewart expressed Consolidated’s strong support for this SLN registration. This support is based on Consolidated’s many decades of favorable experiences with aldicarb (brand name, Temik), up through 2010, when it was voluntarily cancelled by Bayer. As stated in our October 20, 2017 letter: “When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective

pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.”

5. The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 23, 2018.

  
Cody Castinger

BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES

)  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FIFRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
)

**AFFIDAVIT OF ROBERT H. BARBEN AND JOHN P. BARBEN**

We, Robert H. Barben and John P. Barben, do solemnly swear as follows:

1. I, Robert H. Barben, am President and I, John P. Barben, am Vice President, of Robert J. Barben, Inc., 21 East Pine Street, Avon Park, FL 33825. Robert J. Barben, Inc. is a family business that traces its origins back to the 1920s. We have been in the business of growing and managing citrus for many decades. We currently manage about 1800 acres of citrus located in four counties in Florida.

2. We are aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

3. We at Robert J. Barben, Inc. strongly support AgLogic's SLN application for the use of aldicarb on citrus. In a letter dated October 13, 2017 (attached), we affirmed our unqualified support for this SLN registration.

4. The purpose of this Affidavit is to provide further explanation as to why aldicarb is urgently needed by Florida citrus growers today.

5. Our company has extensive experience with the use of aldicarb on citrus. During the 2-3 decades that aldicarb (brand name, Temik) was available to us, we used it regularly in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently saw very positive results with aldicarb. We found that when we used aldicarb, trees were healthier and more productive.

6. The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them.

7. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ASP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.

8. A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.

9. We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficials when we used aldicarb. Aldicarb is applied to the soil, not topically, and works systemically, so there is far less direct

exposure to beneficials with aldicarb.

10. The addition of aldicarb, which is a carbamate with a different mode of action, would be very helpful to citrus growers in managing pesticide resistance.

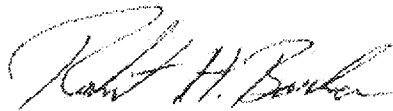
11. If aldicarb were available, we would apply it to the soil in winter months. This would enable us to reduce the number of foliar sprays by at least 2-3 during the spring months, which would reduce adverse impacts on beneficials.

12. Another reason why we urgently need aldicarb back is that it aldicarb increases root growth and fruit production. In our experience, using aldicarb is like giving the tree a steroid; the trees are healthier and there is a very definite growth response. Even more important economically, aldicarb increases the *pounds solids* produced by the tree. No other product compares to aldicarb in stimulating tree growth and fruit production.

13. In summary, aldicarb offers a unique combination of benefits not offered by any other single registered product or combination of registered products. These benefits include broad, long-lasting control of rust mites, minimal impacts on beneficials, and increased tree health and fruit production. These benefits are urgently needed by citrus growers now, more than ever. For these reasons, Robert J. Barben, Inc. urges the Department to approve an SLN registration for AgLogic 15 GG.

We declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.



Robert H. Barben



John P. Barben

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF BETH E. MILESON, PH.D.**

I, Beth E. Milesen, do solemnly swear as follows:

1. I hold the position of Principal Scientific Consultant, Team Leader, Toxicology at Technology Sciences Group, Inc. (TSG), based in TSG's office at 1101 17<sup>th</sup> Street, N.W., Suite 500, Washington, D.C., 20036. I have worked at TSG since 2001,
2. TSG is a part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG).
3. A copy of my Curriculum Vitae is attached. As reflected therein, I received a Ph.D. in Toxicology from the University of North Carolina in Chapel Hill in 1989. I also hold a Bachelor of Science in Biology/Zoology and Master of Science in Biology from George Washington University, as well as a Masters in Business Administration from George Mason University.
4. I am and have been a board-certified toxicologist, otherwise known as a Diplomate of the American Board of Toxicology, continuously since 1996.
5. I have more than 20 years of experience designing, conducting and reviewing toxicological risk assessments.
6. AgLogic asked me to conduct an acute aggregate dietary exposure and risk assessment for aldicarb using the Dietary Exposure Evaluation Model software with the Food

Commodity Intake Database (DEEM-FCID) using methods identical to those used by the U.S. Environmental Protection Agency (US EPA) in its assessment in 2016.<sup>1</sup>

7. The exposure assessment I conducted for AgLogic was intended to estimate potential exposure of the general US population and all sub-populations to aldicarb assuming that 20% of the US citrus crop is treated with aldicarb. For this assessment I used as a starting point the basic data files and assumptions provided by the US EPA in 2016. In addition to the assumed use of aldicarb on 20% of the citrus crop, two assumptions in my aggregate exposure assessment differed from the US EPA: (1) The US EPA assumed that 100% of the imported crops supported by tolerances are treated with aldicarb, while I assumed that no aldicarb residues were in/on imported crops because aldicarb is not registered anywhere outside the US. (2) The aldicarb residue levels in water that I used in the exposure assessment were provided in a report prepared by Waterborne Environmental for AgLogic.<sup>2</sup> The DEEM modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions as described above.

8. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure.<sup>3</sup> Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results

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<sup>1</sup> US EPA, 2016. Memorandum: Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessments for Registration Review Risk Assessment. From: Ideliz Negrón-Encarnación, to: Susan Bartow. PC Code: 098301, DP Barcode: D430197, Office of Pesticide Programs, Office of Chemical Safety and Pollution Prevention, US Environmental Protection Agency, 3/28/2016. 34 pages.

<sup>2</sup> Ritter, A.M. 2017. Aldicarb: Drinking Water Exposure Assessment. Unpublished report by Waterborne Environmental Inc. Study No.: 245.01. November 14, 2017. 22 pages. MRID 50549101.

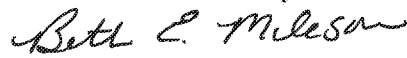
<sup>3</sup> Milesen, B.E. 2017. Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessment for Proposed Uses. Unpublished report by Technology Sciences Group, Inc. Document No.: 20170230. December 28, 2017. 27 pages. MRID 50549102.



in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 24, 2018.

A handwritten signature in cursive script, appearing to read "Beth E. Miles".

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Beth E. Miles

# Curriculum Vitae Beth E Milesen

## **Beth E. Milesen, Ph.D., DABT**

Technology Sciences Group Inc.

Washington, DC 20036

Phone: (202) 828-8956

email: bmilesen@tsgusa.com

## **EDUCATION**

MBA, George Mason University, Fairfax, VA, (2013)

PhD, Toxicology, University of North Carolina, Chapel Hill, NC (1989)

MS, Biology/Zoology, George Washington University, Washington, DC (1984)

BA, Biology, George Washington University, Washington, DC (1981)

## **PROFESSIONAL EXPERIENCE**

### **Technology Sciences Group Inc. (TSG)**

**2001 to Present**

*Technology Sciences Group Inc. is part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG), and provides state, federal and international expertise on a wide range of scientific and regulatory issues. With experts in regulatory affairs, chemistry, toxicology, environmental fate and risk assessment, TSG provides services in support of the development, registration, compliance and defense of chemically related products. Clients include chemical, pesticide, consumer product, food, personal care and animal health companies, as well as industry groups, trade associations, and law firms.*

### **Principal Scientific Consultant, Team Leader**

#### **Responsibilities include:**

- Create comprehensive toxicology and risk assessment strategies to inform clients' business decisions and achieve their regulatory goals;
- Design and conduct human health and ecological risk assessments to support product stewardship, registrations and certifications;
- Meet with federal and state officials and stakeholder groups to discuss and resolve scientific issues;
- Design toxicology testing programs and testing strategies to support new and existing products;
- Support TSG management and staff in scientific and administrative matters.
- Clients include large producers and marketers of consumer products, chemicals and pesticides, as well as a number of small businesses, biotech firms, and trade associations.

### **ARCADIS**

**2000 to 2001**

*ARCADIS is an international company that provides consultancy, design, engineering and management services in the fields of Infrastructure, Water, Environment and Buildings. With more than 22,000 employees and more than \$3.3B in revenues the company has an extensive international network that is supported by strong local market positions.*

## Curriculum Vitae Beth E Milesen

### Principal Scientist

#### Responsibilities included:

- Develop toxicological and human health risk assessments for site-specific and chemical-specific scenarios,
- Develop and maintain client relationships,
- Mentor junior staff.

### **ILSI Risk Science Institute**

**1996 to 2000**

*The International Life Sciences Institute (ILSI) is a nonprofit, worldwide organization whose mission is to provide science that improves public health and well-being. It achieves this mission by fostering collaboration among experts from academia, government, and industry on conducting, gathering, summarizing, and disseminating science. Its activities focus primarily on nutrition and health promotion; food safety; risk assessment; and the environment.*

### Senior Scientist

#### Responsibilities included:

- Design and implement programs to advance the scientific basis of risk assessment;
- Create proposals outlining goals and objectives, strategic plans and budgets necessary to complete projects;
- Collaborate with scientists from U.S. and international agencies and organizations including the U.S. Environmental Protection Agency, Food and Drug Administration and Organization for Economic Cooperation and Development;
- Direct and chair working groups composed of scientists from academia, industry, government and public interest groups and stimulate them to reach consensus on difficult scientific issues.

#### Projects included:

1. Develop principles to determine what constitutes a common mechanism of toxicity;
2. Develop guidance for the design and interpretation of studies to characterize acetylcholinesterase activity in the peripheral nervous system;
3. Develop a framework for cumulative risk assessment; and
4. Evaluate experimental methods to identify and characterize developmental neurotoxicity.

### **NC Department of Environment & Natural Resources**

**1992 to 1996**

*The North Carolina Department of Environment and Natural Resources (DENR) Division of Air Quality (DAQ) works to protect and improve outdoor, or ambient, air quality in North Carolina for the health, benefit and economic well-being of all. To carry out this mission, the DAQ operates a statewide air quality monitoring network to measure the level of pollutants in the outdoor air, develops and implements plans to meet future air quality initiatives, assures compliance with air quality rules, and educates, informs and assists the public with regard to air quality issues.*

### Toxicologist

#### Responsibilities included:

- Design, conduct, and interpret large-scale ambient sampling studies used to characterize concentrations of toxic air pollutants and assess citizen exposure and risk,
- Direct the DENR Secretary's Scientific Advisory Board on Toxic Air Pollutants (SAB),
  - Work with scientists from research institutions, universities, government and industry;
  - Identify toxic air pollutants (TAPs) of concern to North Carolina;

## Curriculum Vitae Beth E Milesen

- Conduct risk assessments for TAPs based on primary literature.

### **Projects included:**

1. Design and direct large-scale ambient monitoring studies to measure TAPs emitted by petroleum terminals, wood furniture manufacturing facilities and polyurethane foam producing facilities;
2. Assess potential human exposure to emissions from hazardous waste-burning incinerators, phosphate mining operations, petroleum terminals and furniture manufacturing facilities based on measured ambient levels and modeled concentrations of TAPs;
3. Prepare risk assessments and derive acceptable ambient levels (AALs) for many toxicants, including, allyl chloride, toluene diisocyanate, methylene chloride and formaldehyde.

### **Duke University Medical Center**

**1989 to 1991**

*Duke University has about 13,000 undergraduate and graduate students and a world-class faculty helping to expand the frontiers of knowledge.*

### **Research Associate, Department of Pharmacology and the Center for the Study of Aging**

#### **Responsibilities included:**

- Design and conduct behavioral, neurochemical and neuropharmacologic studies to determine toxicologic mechanisms involved in selective neuronal degeneration that occurs following transient forebrain ischemia, an animal model of stroke;
- Supervise undergraduate and graduate students and technical staff.

#### **Projects included:**

1. Complete three comprehensive studies on neuronal degeneration,
2. Publish the results in the peer-reviewed literature;
3. Fulfill postdoctoral training in sociology, physiology, cardiology, and disease in aging populations.

### **University of North Carolina- Chapel Hill**

**1985 to 1989**

*The University of North Carolina at Chapel Hill prides itself as the nation's first public university, serving North Carolina, the United States and the world through teaching, research and public service.*

### **Doctoral candidate, Curriculum in Toxicology in the Medical School of UNC – Chapel Hill**

#### **Responsibilities included:**

- Conduct research in Dr. Richard Mailman's Neurotoxicology Laboratory on the effects of toxicants on brain dopamine neurotransmission in rats;
- Train and supervise laboratory technicians.

# Curriculum Vitae Beth E Mileson

## **George Washington University**

**1980 to 1984**

*The George Washington University is located in the nation's capital and is an institution with a history of dedication to educating and preparing future leaders.*

### **Master's degree candidate, Department of Biological Sciences**

- Conduct research in Dr. Randall Packer's laboratory to determine how acid-base balance in tropical land crabs is affected by changing environmental temperature;
- Teach human and advanced human physiology to undergraduate students.

### **Undergraduate Student Researcher, Department of Biological Sciences**

- Conduct undergraduate research in the laboratory of Dr. John Burns, to determine the seasonal variation in the reproductive biology of tropical poeciliid fish in the absence of significant seasonal changes in day-length.

## **CERTIFICATIONS**

Diplomate of the American Board of Toxicology, 1996; recertified: 2001, 2006, 2011, 2016

## **PROFESSIONAL MEMBERSHIPS**

Society for Risk Analysis  
Society for Neuroscience  
Society of Toxicology  
American Association for the Advancement of Science

## **INVITED PARTICIPANT IN WORKING GROUPS/TASK FORCES**

- **Workshop:** Risk Assessment Methodologies Workshop on Approaches to Weight of the Evidence Evaluation in Risk Assessment, ILSI Health and Environmental Sciences Institute, December 2006.
- **Working Group:** Food Safety in Europe: Risk Assessment of Contaminants in Food, **European Union Concerted Action and ILSI Europe**, January-October 2000
- **Workshop:** Threshold of Toxicological Concern, **ILSI Europe**, October 1999
- **Workshop:** The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- **Working meeting** for development of Total Risk Integrated Model, **U.S. EPA**, June 1996
- **Workshop:** Mechanism-based Toxicology in Cancer Risk Assessment: Implications for Research, Regulation and Legislation, **National Toxicology Program**, January 1995
- **Working Group:** Board of Scientific Counselors Ad Hoc Working Group to review the Criteria for Listing Carcinogens, **National Toxicology Program**, April 1995
- Task Force on Risk-Based Protocol for Determination of Soil and Water Clean-up Levels, **NC Department of Environment and Natural Resources**, 1995-1996

## Curriculum Vitae Beth E Mileson

- Ad Hoc Committee for Air Quality Standards **ACGIH**, 1995
- Air Toxics Committee member, **State and Territorial Air Pollution Program Administrators (STAPPA) and Association of Local Air Pollution Control Officials (ALAPCO)**, 1994-1996

### INVITED PRESENTATIONS

- *Cumulative Risk Assessment of OP Pesticides in the Diet based on a Probabilistic Method for Exposure Assessment.* at the Asia-Wide Symposium on Risk Assessment of Contaminants in Food, Seoul, South Korea, **Korea Food and Drug Administration**, November 1999
- *A Framework for Cumulative Risk Assessment* at the workshop: The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- *A Comparison of Three Methods to Cumulate Risk Due to Exposure to Multiple Chemicals that Act by a Common Mechanism of Toxicity.* **American Crop Protection Association**, December 1998
- *Common Mechanism of Toxicity, Report of the ILSI RSI Working Group.* **EPA FIFRA Scientific Advisory Panel**, 1998
- *Common Mechanism of Toxicity: A Case Study of OP Pesticides* **EPA OPP Pesticide Program Dialogue Committee**, 1998
- *Procedures and Functions of the Secretary's Scientific Advisory Board on Toxic Air Pollutants.* **NC Legislative Committee on Air Quality** 1996
- *Monthly Briefing* Air Quality Committee of the **North Carolina Environmental Management Commission**, 1995-1996
- *Investigation of Bulk Gasoline Terminals at Paw Creek, Mecklenberg County, NC.* **NC Legislative Environmental Review Committee**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation*, **Press Conference**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation*, **Public Meeting**, February 1994
- *Reconciliation of the NC Regulations for Control of Toxic Air Pollutants with the Federal Clean Air Act of 1990.* **NC Aggregates Association**, May 1993 and **Guilford County LEPC Industry Forum Meeting**, May 1993

### ADDITIONAL PROFESSIONAL ACTIVITIES

- Partner with ILSI Europe on **A European Commission Concerted Action** on Risk Assessment of Chemicals in Food and Diet, April, 2000-February 2001
- Organized and chaired a symposium on Cumulative Risk Assessment at the **Society for Risk Analysis Annual Meeting**, December 1999
- Nominated as a potential member of the **EPA FIFRA Scientific Advisory Panel** (declined due to participation in ILSI activities germane to issues considered by the SAP) October, 1997
- Member of the Editorial Advisory Board, **Reviews in Toxicology**, **IOS Press** (2001).

**FULL LENGTH REFEREED PUBLICATIONS**

1. Milesen, B.E., Packer, R.K., 1986. Hemolymph acid base balance in the terrestrial crab, *Gecarcinus ruricola*, with changing environmental temperature. **Comp. Biochem. Physiol.** 85A:4;715719.
2. Milesen, B.E., Schwartz, R.D., 1991. The use of locomotor activity as a behavioral screen for neuronal damage following transient forebrain ischemia in gerbils. **Neuroscience Letters** 128; 71-76.
3. Milesen, B.E., Lewis, M.H., Mailman, R.B., 1991. Dopamine receptor "supersensitivity" occurring without receptor up-regulation. **Brain Research**, 561; 1-10.
4. Schwartz, R.D., Yu, X., Wagner, J., Ehrmann, M., Milesen, B.E., 1992. Cellular regulation of the benzodiazepine/GABA receptor: arachidonic acid, calcium, and cerebral ischemia. **Neuropsychopharmacology**, 6; 119-125.
5. Milesen, B.E., Ehrmann, M.L., Schwartz, R.D., 1992. Alterations in the GABA-gated chloride channel following transient forebrain ischemia in the gerbil. **Journal of Neurochemistry**, 58; 600-607.
6. Lawler, C.P., Gilmore, J.H., Mooney, D.H., Mayleben, M.A., Atashi, J.R., Milesen, B.E., Wyrick, S.D., Mailman, R.B., 1993. A rapid and efficient method for the radiosynthesis and purification of [125I]SCH23982. **Journal of Neuroscience Methods**, 49; 141-153.
7. Milesen, B.E., Chambers, J.E., Chen, W.L., Dettbarn, W., Ehrich, M., Eldefrawi, A.T., Gaylor, D.W., Hamernik, K., Hodgson, E., Karczmar, A.G., Padilla, S., Pope, C.N., Richardson, R.J., Saunders, D.R., Sheets, L.P., Sultatos, L.G., Wallace, K.B., 1998. Common mechanism of toxicity: A case study of organophosphorus pesticides. **Toxicological Sciences**, 41; 8-20.
8. Milesen, B.E., Chambers, J.E., Ehrich, M., Hamernik, K., Hodgson, E., Reith, J.P., Saunders, D.R., Sheets, L.P., Sultatos, L.G., Van pelt, C., Wallace, K.B., 1999/2000 Common mechanism of toxicity: evaluation of carbamate pesticides. **Reviews in Toxicology**, 3; 127-138.
9. Milesen, B.E., Ferenc, S.A., 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment: overview. **Environmental Health Perspectives**, 109 (suppl 1); 77-78.
10. Cory-Slechta, D.A., Crofton, K.M., Foran, J.A., Sheets, L.P., Ross, J.F., Weiss, B., **Milesen, B.E.** 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment. II: behavioral considerations. **Environmental Health Perspectives**, 109 (suppl 1); 79-91
11. Dorman, D.C., Allen, S.L., Byczkowski, J.Z., Claudio, L., Fisher, J.E., Fisher, J.W., Harry, G.J., Li, A.A., Makris, S.L., Padilla, S., Sultatos, L.G., **Milesen, B.E.** 2001 Methods to identify and characterize developmental neurotoxicity for human health risk assessment. III: Pharmacokinetic and pharmacodynamic considerations. **Environmental Health Perspectives**, 109 (suppl 1);101-111.
12. Edler L, Poirier K, Dourson M, Kleiner J, **Milesen B**, Nordmann H, Renwick A, Slob W, Walton K, Wurtzen G. 2002. Mathematical modeling and quantitative methods. **Food Chem Toxicol.** 40(2-3):283-326.

## Curriculum Vitae Beth E Milesen

13. Gargas M.L., Kinzell J.H., Milesen B.E. 2009. Foreword to a special issue of Inhalation Toxicology on a risk assessment for iodomethane. **Inhal Toxicol.** 21(05-07); 447.
14. Milesen B.E., Sweeney L.M., Gargas M.L., Kinzell J.H. 2009. Iodomethane Human Health Risk Characterization. **Inhal Toxicol.** 21(05-07); 583-605.

### BOOK CHAPTERS AND NONREFEREED PUBLICATIONS

1. Mailman, R.B., Milesen, B.E., Lewis, M.H., 1987. Neurotoxicity expressed through alterations of cell cell interaction. in: **Biochemical mechanisms and regulation of intracellular communication.** Princeton Scientific Publishing, Princeton, N.J. pp 97112.
2. Milesen, B.E., Hedrick, M., 1996. Evaluation of emissions from a bulk petroleum terminal cluster in Mecklenberg County, NC. **Air & Waste Management Meeting Proceedings, 1995 meeting.**
3. Milesen, B.E., 1996. Investigation of toxic air pollutants emitted by wood furniture manufacturing facilities in Caldwell County, North Carolina. **NC DEHNR Air Quality Investigation Report**
4. Milesen, B.E., 2001. Guest Perspective: EPA Pesticide Cumulative Risk Model Evolution Continues. **Risk Policy Report.** Volume 8 (10) 30-32.

### ABSTRACTS

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## Curriculum Vitae Beth E Milesen

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# **ATTACHMENT 2**

## Letters from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida

The attached 11 letters were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the sworn affidavits that were submitted by these researchers and citrus growers.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC -- 10/16/17**

(Also see the sworn affidavit from Dr. Philip Stansly, dated 5/21/18)

*"There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane."*

**2. Walter T. Jerkins, President, Premier Citrus LLC -- 10/11/17**

(Also see the sworn affidavit from Walter T. Jerkins, dated 5/23/18)

*"Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus."*

**3. John Gose, General Manager, Lykes Bros. Inc -- 10/2/17**

(Also see the sworn affidavit from John Gose, dated 5/17/18)

*"We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc -- 9/28/17**

(Also see the sworn affidavit from William Roe, dated 4/27/18)

*"As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant*

*and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product."*

**5. Steve Ryan, President, Alico Citrus -- 10/10/17**

(Also see the sworn affidavit from Dave Owens, Director of Chemical Sales, Alico Citrus, dated 5/29/18)

*"As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product."*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 10/11/17**

(Also see the sworn affidavit from Tim Dooley, dated 5/17/18)

*"Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!"*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC – 11/3/17**

(Also see the sworn affidavit from Marvin Kahn, dated 5/xx/18)

*"We have had experience using Aldicarb in the past and have witnessed firsthand its positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods."*

**8. Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP – 10/20/17**

(Also see the sworn affidavit from Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP, dated 5/23/18)

*"I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers*

*who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials."*

**9. John Barden, Vice President, Barben Fruit Company Inc – 10/13/17**

(Also see the sworn affidavit from John Barden, dated 5/30/18)

*"Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid."*

**10. David Howard, Vice President Operations, Graves Brothers Company – 11/3/17**

*"Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control."*

**11. Keith Davis, Owner, Florida Fertilizer Company Inc -- 10/10/17**

*"Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements."*

Southwest Florida Research and Education Center  
2686 State Road 29 North  
Immokalee, FL 34142-9515

239-658-3400  
239-658-3469 Fax  
<http://swfrec.ifas.ufl.edu>

To: Antoine A. Puech, Managing Member, AgLogic Chemical LLC  
From: Dr. Philip A. Stansly, [pstansly@ufl.edu](mailto:pstansly@ufl.edu)  
Cc: Ron Hamel, Gulf Citrus Growers Association  
Date: 16 October 2017  
Subject: Re-registration of aldicarb

Dear Sir,

By means of this memo I would like to express my full support for the re-registration of Aldicarb in citrus. I am a research and extension entomologist working on citrus at this Center since 1989. My appointment is state wide with emphasis of the southwest growing regions which comprises about 25% of total citrus production in the state. During this time I have had considerable experience working with aldicarb, both pre and post greening (HLB) as you can see from the citations below. In my estimation aldicarb is an excellent product both in terms of efficacy as well as environmental and personal safety, thanks to the safeguards and stewardship actually in place.

There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane. Therefore, I urge that no effort be spared in registering aldicarb again for citrus in Florida and elsewhere in the US wherever citrus is grown. Please feel free to contact me for any additional information with respect to this issue.

Best Regards,

Digitally signed by Phil Stansly  
DN: cn=Phil Stansly, o=UF-IFAS, ou=SWFREC,  
email=pstansly@ufl.edu, c=US  
Date: 2017.10.16 11:58:17 -04'00'

Philip A. Stansly  
Professor of Entomology

**References cited:**

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P.O. BOX 690759  
Vero Beach, FL 32969

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 So Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech;

I am writing this letter with the intent to offer my full support as well as the full support of all of Premier's citrus related companies and clients in Florida for the re-registration of Aldicarb as a restricted use pesticide in Florida.

I currently serve as President of Premier Citrus and Premier Citrus Management, and together these companies have directly managed over 20,000 acres of citrus annually, in seven different Florida counties since 2005. Premier also operates one of the industry's largest fresh fruit packing houses, as well as one of the largest fresh citrus marketing companies. Prior to working with Premier, I managed the state's largest grove management company, Blue Goose Growers all the way back to 1980, including the Dole Citrus activities between 1983 and 2000.

My experience in crop management goes all the way back to 1975, but closer to 1980 when I first became actively involved and responsible for the selection and use of citrus pesticides. Since Aldicarb first became available in Florida, we used the product on practically all of our managed acres at the labeled rate due to the easiest of all metrics to track: higher earnings.

Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus.

Improved yields were most often a result of improved size, which always carries a premium in the fresh fruit business. That size improvement as well as overall blemish control was easily noticed in the packinghouse and drove more favorable size and quality packages, again driving up revenues for fresh fruit as well as juice fruit.

In fact, the product was so important to our annual production plan that actively participating in complying with the Stewardship program was a high company priority to insure

that by our safe use we could help the registrant keep the product available out into the future. It was a major disappointment when Bayer voluntarily pulled the label in 2010, and we believe strongly that its discontinued use and loss of the PGR and other effects coincided and contributed to both our company and the Florida industry yield decline as the additional pressure of ACP and HLB expanded and has contributed to this day.

Premier's current nucleus of excellent grove managers happen to be the remnants of one of the industry's largest Aldicarb applicators prior to 2010, and we have access to those same machines now. Together with those machines and experienced managers and applicators, Premier could be in the application business as quickly as anyone, as we have the weight of the grove financial base also pushing for this application capability.

The availability of Aldicarb will be a valuable offset to the nagging weak tree health that continues to suffocate our yields. HLB has the Florida industry on its heels, and with the last hurricane, it's fair to say we're desperate to obtain any tools that can even incrementally get us back to improved productivity and revenues to keep us in business.

Please keep up your best effort to obtain a registration by whatever means necessary, and consider Premier a strong supporter willing to help you at every turn.

Thank you for considering our need and our support of your pursuit of the use of Aldicarb for Florida citrus growers.

A handwritten signature in black ink, appearing to read "Walter T. Jerkins, Jr.", with a stylized flourish at the end.

Walter T. Jerkins, Jr.  
President, Premier Citrus, LLC  
625 66th Ave SW, 32968  
Vero Beach, Florida  
Ph: 772-469-1549, Mobile: 772-473-9754

# LYKES BROS. INC.

7 Lykes Road  
Lake Placid, FL 33852-9582



Telephone: (863) 465-4127  
FAX: (863) 465-2289

To: Antoine Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

October 2, 2017

Dear Mr. Puech,

My name is John Gose and I am the General Manager for Lykes Bros. Inc. Our company has been a major player in the citrus industry for many decades now. We have over 6,000 acres of active citrus land with various varieties of oranges for juice. We have been in a war against HLB for many years and time is running out for many growers. Just five short years ago we were at over 16,000 active citrus acres. The loss of over 10,000 acres is a direct result of citrus greening. The need is great to resurrect a product that will help us fight multiple pests as well as promote tree health and growth and increase fruit yields.

As a grower we used aldicarb in the past under the registered name of Temik. We are aware that aldicarb requires precise application and safety requirements and I can assure you we are prepared to follow the stringent program in our groves. The reinstatement of aldicarb in the citrus industry is crucial to our survival. We recently suffered major setback due to Hurricane Irma and that toppled with the constant pressure of Citrus Greening has many growers in a fight to stay in business. We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops.

John Gose,

A handwritten signature in black ink, appearing to read 'John Gose'.

General Manager

# Wm. G. Roe & Sons, Inc.

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Noble  
Noble Express  
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Red Deer  
Peace River Valley  
Blue Lake  
Tru-Tone  
Tru-Type  
Blu-Knight

To: Antoine Puech  
Managing Member AgLogic Chemical LLC  
121 South Estates Drive, Suite 101  
Chapel Hill, NC 27514

From: Bill Roe  
VP Operations Wm. G Roe & Sons Inc.  
Winter Haven, FL 33882

Date: September 28, 2017  
Re: AgLogic 15GG Aldicarb pesticide

Dear Mr Puech:

I am writing this letter in support of the re-registration of Aldicarb as a restricted use pesticide for use on Florida citrus.

Our company Wm G Roe & Sons is a long standing player in the citrus industry in Florida. We own manage or operate approximately 3,000 acres of citrus across various locations throughout the citrus belt. We have a diversified portfolio of varieties which range from Pomelo to Tangerines and our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are the leading shipper of tangerines in the state of Florida and our brand Noble is highly respected in retail and terminal markets. We had used Aldicarb in the form of Temik for many years during the decades of the 80's, 90's, and 2,000's.

At one point during the 90's we were certified commercial applicators in addition to using it on all of our own acreage for which it could be permitted.

As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product.

We recognize that Aldicarb requires a stringent stewardship program to insure its safe and appropriate application. Florida had implemented a rigorous stewardship program through its Dept of Agriculture during the prior application period which required prior site inspections, well set-backs, and application permits specific to site. For many years this program was successfully administered and has a legacy of providing the industry with a proven tool to enhance tree vigor, yield and fruit quality.

As an industry besieged with disease and recent bad weather luck we sorely need this product for use in our groves to offset the deleterious impacts of Greening.

Sincerely,





October 10, 2017

Antoine Puech  
Managing Member  
Aglogic Chemical LLC  
121 S Estates Drive Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

My name is Steve Ryan and I am the President of Citrus Operations for Alico. Our company grows 32,000 acres of citrus throughout Florida. We currently have 250 full time employees as well as several hundred contract laborers.

We have been battling Huanglongbing, aka citrus greening, for several years and have seen our production decline rapidly as a direct result of this disease. One of our primary weapons against the vectors of this disease was Aldicarb which we used until it was taken off the market in 2010. Now is the time to resurrect this product as a much needed tool in our battle to stop the devastating ravages of this disease.

We at Alico understand that this product requires diligent stewardship activities and are committed to ensuring this product is used in a safe and responsible manner. Our company has experience in using millions of pounds of Aldicarb for over 20 years without incident.

The damage caused by Hurricane Irma has only exacerbated our need to have this product available to us as soon as possible. We appreciate the efforts of Aglogic in bringing this product back to the citrus industry. Alico is committed to assisting you however we can in obtaining regulatory approval. It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications.

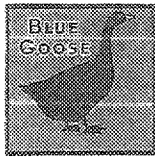
Thank you again for your efforts to get this product reinstated for the citrus industry. It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Ryan", is written over a circular stamp. The signature is fluid and cursive.

Steve Ryan  
President

12010 E Hwy 70  
Arcadia, FL 34266



**Blue  
Goose  
Growers**

**Florida Grove and Crop Management L.L.C**

P.O. Box 14709  
Ft Pierce, FL 34979  
Phone (772) 461-3020  
Fax (772) 468-4669

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S. Estates Dr., Suite 101  
Chapel Hill, NC 27514

**RE: Aldicarb (Temik) Re-Registration**

Dear Mr. Puech:

As General Manager of Blue Goose Growers, a 10,000 acre citrus management company, located on the east coast of Florida, I fully support your effort to re-register Temik for use on citrus in Florida.

As you are aware, our industry is suffering and in need of every available tool to control the spread of citrus greening and make this industry viable again. Allowing Temik to be used again on citrus in Florida will once again allow us to have a familiar product, a product that works, to control the pests that carry diseases that threaten our citrus crops.

Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!

We all genuinely appreciate your effort to expedite this re-registration effort, and look forward to having Temik available for use.

Sincerely Yours,

  
Timothy J. Dooley  
VP/GM, BGG

## Antoine Puech

---

**From:** Marvin Kahn <mkahn@kahngrove.com>  
**Sent:** Friday, November 03, 2017 3:52 PM  
**To:** Antoine Puech  
**Cc:** mikes@flicitrusmutual.com; Andrew Meadows; Trevor Murphy  
**Subject:** Aldicarb

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Good afternoon Mr. Puech,

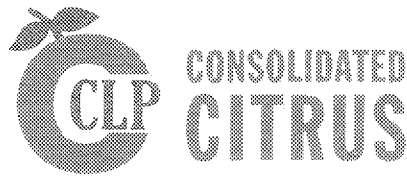
We are a third-generation citrus growing operation, with experience in the industry dating back to the 1930s when my father purchased his first orange grove. We have had experience using Aldicarb in the past and have witnessed firsthand it's positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods. Please let us know if there is anything we can do to assist you in this process.

If you have not heard from the five or so grower organizations CEO's , we or Mike Sparks and Andrew Meadows could help in this regard.

Regards,

Marvin Kahn  
Kahn Citrus Management, LLC  
Murphy Ag Solutions of the Heartland, LLC  
P.O. Box 3346  
Sebring, FL 33871  
863-381-0384 (Cell)  
863-385-6136 (Office)  
863-382-9737 (Fax)





10/20/2017

Michael Stewart, Manager  
Horticultural Services  
Consolidated Citrus LP  
63 Barn Rd.  
Venus, FL 33960

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

In my position as Manager – Horticultural Services for Consolidated Citrus LP, I am writing in support of AgLogic LLC's application to register AgLogic 15GG Aldicarb pesticide for use in citrus in the state of Florida. Consolidated Citrus has nearly 30,000 acres of citrus, making it one of the largest citrus production companies in Florida. I have used Aldicarb, as the branded product Temik, for many years under three different registrants, Union Carbide, Rhone Poulenc and Bayer Crop Science. I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials. If AgLogic 15GG Aldicarb is registered and priced right, Consolidated Citrus would very likely use it for both fresh and processed citrus fruit production. Thank you for your efforts to register this product.

Sincerely yours,

Michael Stewart, Manager  
Horticultural Services

63 Barn Road  
Venus, FL 33960

(p) 863-699-6090  
(f) 863-465-6837





October 13, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

Our company has been growing citrus in central Florida since the 1920's. The fifth generation has just joined us and expanded our farming operation to include blueberries. My two brothers and I manage the day to day farming activities personally meaning our boots are in the groves.

I am writing to support AgLogic Chemical LLC to pursue the registration for AgLogic 15GG Aldicarb for use in Florida citrus. For more than 20 years, Aldicarb (brand name Temik) was one of the most effective inputs to manage a broad range of citrus pests systemically in the tree. This resulted in substantial increases in fruit yields and quality as well as improved growth

The grower community is encouraged by your effort to get an Aldicarb product again registered in Florida citrus. Right now, growers are in the fight of their life against a disease known as HLB, or citrus greening. HLB is a vascular disease vectored by the Asian citrus psyllid (ACP). It is endemic to the state of Florida and it can kill a tree within two years. Our crop has shrunk by more than 66 percent since the onset of HLB.

No cure exists although a massive research effort over the past decade has made headway. Adding Aldicarb back to the toolbox will help slow the spread of the disease through an effective integrated management program. When Temik was registered in Florida citrus, growers followed an intensive stewardship program regulated at both the state and federal level. All application sites were monitored prior to the start of the approved application period. All wells at each site were identified, located, and flagged with a setback. The program clearly showed that Aldicarb can be used safely.

Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid.

Regards,

A handwritten signature in dark ink, appearing to read "John P. Barben".

John P. Barben  
VP, Robert J. Barben, Inc.  
VP, Barben Fruit Co., Inc.



November 3, 2017

Antoine A Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

I am writing this letter to offer my support, and the support of Graves Brothers Company, in the pursuit of re-registration of Aldicarb as a restricted use pesticide on Florida citrus.

Having been raised in Central Florida while working on family owned citrus properties, and as a graduate of The University of Florida Citrus Horticulture Program, I feel that my 30 years of citrus production experience qualifies me to encourage the return of Aldicarb (AgLogic 15GG) pesticide to the Florida Citrus Industry.

I currently manage the agricultural properties owned by Graves Brothers Company. GBC has been involved in Florida agriculture since the 1930's and currently owns and manages 9,000 acres of cattle, timber, vegetable, ornamental and citrus production in Florida. Over the last 70 years Graves Brothers Company has been heavily focused on all phases of the Florida Citrus Industry from nursery tree production through citrus harvesting, packing and sales.

We are struggling, as is the entire Florida Citrus Industry, with the bacterial disease Huanglongbing and its associated vector Asian Citrus Psyllid. The reduction in tree health brought on by this imported disease and its introduced vector has placed our entire industry on the precipice of collapse. Our industry is desperately in need of tools to combat this endemic disease.

Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control.

It is my understanding that Ag Logic 15GG will be labeled for application and use by the same Florida Rule (Rule 5E2.028) as in the past. The history of stewardship of Aldicarb by Florida Citrus Growers under these guidelines has proven that this product can be used safely and without any unacceptable environmental risk. The cadre of growers and applicators that were part of this successful history are more than capable of continuing this legacy in Florida citrus.

Please consider the needs of Graves Brothers Company and more specifically the needs of The Florida Citrus Industry as you endeavor to return this important tool to our diminished grower toolbox.

Sincerely,

David F Howard  
Vice President of Operations  
Graves Brothers Company  
2770 Indian River Boulevard, Suite 201  
Vero Beach, Florida  
Phone: 772.562.3886, Mobile: 772.473 9622

2770 Indian River Blvd; Suite 201, Vero Beach, Florida 32960-4230  
Phone (772) 562-3886 Fax (772) 562-3565  
[www://GravesBrothersCompany.com](http://www.GravesBrothersCompany.com)

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# FLORIDA FERTILIZER COMPANY, INC.

P.O. BOX 1087 • WAUCHULA, FL 33873-1087  
(863) 773-4159 • FAX # (863) 773-9363  
office@flfertilizer.com

October 10, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

My name is Keith Davis. I am a citrus grower, fertilizer and agricultural chemical supplier. I own approximately 175 acres of citrus, and make recommendations for many customers in the citrus industry.

I strongly support AgLogic efforts to register AgLogic 15GG for use on citrus in the state of Florida. As a citrus grower and chemical supplier, with almost 40 years of experience, I have seen firsthand what Aldicarb does for a citrus tree. Aldicarb makes it "Healthy"! Why? It reduces nematodes on the roots, and controls piercing and sucking insects. Aldicarb also increases pound solids of fruit, enables it to handle stress from cold weather, and should help trees survive and be able to withstand the effects of citrus greening (HLB) bacteria.

Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements.

AgLogic 15GG would be a great product to have for Florida citrus, to keep this great industry strong and viable.

Sincerely,



Keith Davis





Message

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**From:** Beck, Nancy [Beck.Nancy@epa.gov]  
**Sent:** 7/2/2018 6:38:51 PM  
**To:** Baptist, Erik [Baptist.Erik@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]  
**Subject:** Fwd: AgLogic Florida SLN [IWOV-PaleyDocs.FID579377]  
**Attachments:** 3588985\_1.pdf; ATT00001.htm; ATT1.pdf; ATT00002.htm; ATT2.pdf; ATT00003.htm

FYI.

\*\*\*\*\*

Nancy B. Beck, Ph.D., DABT  
Deputy Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
P: 202-564-1273

**Personal Matters / Ex. 6**

beck.nancy@epa.gov

Begin forwarded message:

**From:** "Jim Rathvon" <jrathvon@paleyrothman.com>  
**To:** "Keigwin, Richard" <Keigwin.Richard@epa.gov>, "Beck, Nancy" <Beck.Nancy@epa.gov>  
**Cc:** "Gebken, Richard" <Gebken.Richard@epa.gov>, "Maignan, Tawanda" <Maignan.Tawanda@epa.gov>, "Antoine Puech" <antoinepuech@meycorp.com>, "Cristen S. Rose" <crose@paleyrothman.com>, "47788\_0001 \_ Aglogic Chemical\_ LLC Florida Citrus" <[F579377].PaleyDocs@NDM.paleyrothman.com>  
**Subject:** AgLogic Florida SLN [IWOV-PaleyDocs.FID579377]

Dear Mr. Keigwin and Ms. Beck: Attached is a letter on behalf of AgLogic Chemical LLC concerning an issue of great importance to Florida citrus growers and, indirectly, American consumers. Thank you in advance for your attention to this urgent matter.

Respectfully submitted,

Jim Rathvon  
Cristen Rose  
Counsel for AgLogic Chemical LLC

James P. Rathvon  
Attorney At Law  
Bio | Vcard



4800 Hampden Lane | 6th Floor | Bethesda, MD 20814 | 301-951-9342 | www.paleyrothman.com

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July 2, 2018

**BY ELECTRONIC AND OVERNIGHT MAIL**

Rick Keigwin, Director  
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USEPA Headquarters  
William Jefferson Clinton Building  
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Washington, DC 20460-0001  
([keigwin.richard@epa.gov](mailto:keigwin.richard@epa.gov))

Nancy Beck, Deputy Assistant Administrator  
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William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N. W.  
Washington, DC 20460-0001  
([beck.nancy@epa.gov](mailto:beck.nancy@epa.gov))

Re: Critically Important Pesticide SLN to Help Embattled Florida Citrus Industry

Dear Sir and Madame:

This letter requests your – and the Agency’s – support for a FIFRA Section 24(c) Special Local Need registration (SLN) for AgLogic 15GG, a granular insecticide containing 15% aldicarb, to control Asian citrus psyllid, citrus rust mites, spider mites, aphids and nematodes on Florida citrus. The SLN application was filed with the Florida Department of Agriculture and Consumer Services (FLDACS) on June 1, 2018 by AgLogic Chemical, LLC, the sole U.S. registrant of aldicarb.

The key facts are these:

1. The Florida citrus industry is on “the brink of annihilation” (Dr. Phillip Stansly, Professor of Entomology, U. Fl., 10/16/17 Letter). It has been ravaged by the citrus greening disease (HLB), transmitted by the Asian citrus psyllid (ACP), and there has been an **80% loss** in production of citrus statewide.<sup>1</sup>
2. Florida growers are losing the battle against the spread of citrus greening disease. At best, the current toolbox of chemical treatments only modestly retards the advance of the disease, but does nothing to improve production. As stated by one grower: “Absent better tools citrus growers will be out of business soon!” (Tim Dooley, Vice President and General Manager, Blue Goose Growers, LLC, 10/11/17 Letter). The intensive use of foliar treatments to fight psyllids has also resulted in other pest problems, including the development of resistance as well as spikes in mite, weevil, and aphid populations.

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<sup>1</sup>. At the time HLB was first discovered in 2003-2004, Florida orange production totaled 242 million boxes. In April 2018, the USDA National Agricultural Statistics Service estimated that just 45 million boxes of oranges would be harvested in 2017-2018 – a decrease of 197 million boxes, or 81%. USDA/NASS, Citrus April Forecast 2017-2018 Season (April 10, 2018) *available at*: [https://www.nass.usda.gov/Statistics\\_by\\_State/Florida/Publications/Citrus/Citrus\\_Forecast/2017-18/cit0418.pdf](https://www.nass.usda.gov/Statistics_by_State/Florida/Publications/Citrus/Citrus_Forecast/2017-18/cit0418.pdf).



3. ***The Florida citrus industry – including the largest growers in the state – enthusiastically support an SLN registration for AgLogic 15GG.*** Indeed, several prominent growers have taken the unusual step of submitting both signed affidavits (Attachment 1) and letters (Attachment 2) detailing why they so urgently need aldicarb.<sup>2</sup> As they explain, a unique attribute of aldicarb is that it stimulates tree health and root growth and ***markedly increases fruit size and yield***, precisely what growers need now to stay in business. Aldicarb is also effective against many pests, including psyllids, mites and nematodes, among others. As one grower has testified: “Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.” (John Gose, General Manager, Lykes Bros. Inc.; 5/17/18 Affidavit).
4. Florida citrus growers are familiar with aldicarb because they used the product (under the trade name, TEMIK 15G) with great results for several decades (~1978-2010), until Bayer, the sole registrant, *voluntarily* cancelled the registration and withdrew from the market, pursuant to a well-publicized corporate decision to exit all WHO Class 1 products.
5. FLDACS has advised AgLogic that it will not approve the SLN unless it is assured that EPA will not disapprove it. It is our understanding that EPA has not yet had the opportunity to review the SLN, attached affidavits and other materials demonstrating the Special Local Need for aldicarb. However, we also understand that there have been early indications by staff members in EPA’s OPP that OPP is inclined to ***deny*** the SLN.

We submit that OPP’s current disinclination to approve the SLN is unjustified and contrary to the public interest. The following points may clarify why we believe this:

6. At the time Bayer cancelled its aldicarb registrations, EPA was concerned about possible dietary risks to infants and children from consumption of food and drinking water containing aldicarb residues. For this reason, AgLogic’s subsequently-obtained registration for AgLogic 15GG, which is approved for use on cotton, peanuts and certain other crops, did not include use on citrus.
7. Over the past several years, aldicarb has undergone Registration Review. During this process, AgLogic implemented significant changes to the product label that result in aggregate dietary exposures to aldicarb well below the 2010 EPA Level of Concern. EPA has recently issued an Interim Registration Review Decision concluding that aldicarb may continue to be registered.
8. To assist the Agency in its assessment of aldicarb, including for use on citrus under a Florida SLN, AgLogic commissioned Dr. Beth Mileson, Principal Scientific Consultant, TSG Consulting, to conduct an acute dietary exposure and risk assessment for aldicarb.

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<sup>2</sup> For convenience, each attachment also includes a cover sheet highlighting relevant excerpts from the affidavits and letters, respectively.

This risk assessment was submitted to EPA earlier this year. Dr. Mileson's affidavit (included in Attachment 1) affirms that she conducted the risk assessment using models and methods identical to those used by EPA's risk assessors. The risk assessment demonstrates that 20% of the US citrus crop may be treated with aldicarb and dietary exposures (including food and water) for all sub-populations are well below any level of concern.

In short, there is no scientific basis for EPA to disapprove the SLN due to dietary risk.

\* \* \*

In summary, this SLN is critically important to a Florida citrus industry that desperately needs help. We urge you to take the steps necessary to ensure that OPP makes a full and fair assessment of the SLN, including its substantial benefits to American growers and consumers.

Time is of the essence. Application of AgLogic 15GG must occur during the dry season, which runs from mid-November through April at the latest. Even after the SLN is approved, several additional steps must be taken before applications can occur. Most important, AgLogic must identify applicators that have (or are willing to purchase) the necessary application equipment, and these applicators must be trained to ensure compliance with AgLogic's product stewardship program. Applicators must also petition FLDACS for permission to apply the product. Aldicarb has not been used on citrus since 2011, so considerable lead time is required to restart applications.

In furtherance of the process, AgLogic requests the opportunity to meet with the Agency as soon as possible to discuss the SLN and respond to any questions or concerns OPP may have. Depending on schedule, it is likely that one or more citrus growers and FLDACS officials will attend the meeting as well.

Thank you in advance for your attention to this important matter. Please do not hesitate to contact us if you have any questions or would like to discuss these issues further.

Sincerely,



James P. Rathvon  
Cristen S. Rose  
Counsel for AgLogic Chemical, LLC

Attachments

cc (by email and overnight mail):  
Richard Gebken, OPP  
Tawanda Maignan, OPP  
Antoine Puech, President/CEO of AgLogic



# **ATTACHMENT 1**

## **Affidavits from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida**

The attached 10 sworn affidavits were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the letters of support that were submitted by these researchers and citrus growers in late 2017.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC – 5/21/18**  
(Also see letter of support from Dr. Philip Stansly, dated 10/16/17)

*Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”*

*One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.*

*Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.*

**2. Walter T. Jerkins, President, Premier Citrus LLC – 5/23/18.**  
(Also see letter of support from Walter T. Jerkins, dated 10/11/17)

*Aldicarb is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.*

*Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.*

*The yield response from the use of aldicarb is robust, resulting in a sustained yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.*

*The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity - precisely the effects that are so desperately needed now by the citrus industry.*

**3. John Gose, General Manager, Lykes Bros. Inc – 5/17/18**  
(Also see letter of support from John Gose, dated 10/2/17)

*Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.*

*A serious drawback of foliar insecticides is that they can wipe out pollinators and other "beneficials" (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.*

*In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly higher pounds of solids per box, producing a very positive net economic return.*

*The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc – 4/27/18**  
(Also see letter of support from William Roe, dated 9/28/17)

*Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest*

*management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.*

*This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both - suppress psyllids and protect beneficials during bloom time - because of its systemic mode of action.*

*Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.*

**5. Dave Owens, Director of Chemical Sales, Alico Citrus -- 5/29/18**

(Also see letter of support from Steve Ryan, President, Alico Citrus, dated 10/10/17)

*Alicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides*

*The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.*

*Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 5/17/18**  
(Also see letter of support from Tim Dooley, dated 10/11/17)

*Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.*

*In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.*

*In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC -- 5/xx/18**  
(Also see letter of support from Marvin Kahn, dated 11/3/17)

*Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better - and are healthier - than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.*

*Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.*

*Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.*

**8. Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP -- 5/23/18**  
(Also see letter of support from Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP, dated 10/20/17)

*When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.*



*The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.*

**9. John Barden, Vice President, Barben Fruit Company Inc – 5/30/18**

(Also see letter of support from John Barden, dated 10/13/17)

*The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ACP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.*

*A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.*

*We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficial when we used aldicarb.*

**10. Dr. Beth Milesen, Principal Scientific Consultant, TSG Consulting – 5/24/18**

*The modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure. Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.*

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF PHILIP A. STANSKY, Ph.D.**

I, Philip A. Stansky, do solemnly swear as follows:

1. I am Professor of Entomology at the University of Florida (UF), Southwest Florida Research and Education Center, 2686 State Road 29 North, Immokalee, FL 34142. I joined UF in 1986, and moved to the Immokalee location in 1989.

2. I hold a Ph.D. in Entomology from Texas A&M (1985), an M.S. in Zoology from the University of Oklahoma (1978), and a B.S. in Zoology from Wayne State University (1967).

3. I am a research and extension entomologist focused on the integrated management of pests affecting major crops grown in southwest Florida, with emphasis on citrus and vegetables. I am the lead author or co-author of more than 538 scientific publications and 158 extension publications in my field, including 172 peer-reviewed articles. I am also the editor of a book and author of 9 book chapters relating to pest management.

4. I develop and test integrated systems of economic and sustainable pest management and their component tactics. I consult with members of the agricultural community, and provide information, training and diagnostic services in collaboration with county and multi-county agents.

5. A key focus of my work for the last 13 years has been and remains the citrus greening disease or huanglongbing (HLB), transmitted by the Asian citrus psyllid (ACP)

*Diaphorina citri*. My work is multifaceted and has included research on the use of aldicarb to control ACP and other citrus pests and to improve citrus yields.

6. Aldicarb (brand name, Temik) was registered for use on citrus in Florida for nearly 30 years until Bayer voluntarily cancelled all of its aldicarb registrations and exited the business at the end of 2010. Subsequently, AgLogic Chemicals, LLC obtained an EPA registration for an aldicarb product similar to Temik, called, AgLogic 15G, labeled for use on several crops not including citrus. AgLogic 15 G was subsequently approved in 2017 for use in Florida on peanuts and cotton by the Florida Department of Agriculture and Consumer Services.

7. I am aware that, at the request of numerous citrus producers, AgLogic Chemicals LLC applied to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG for use on citrus in Florida.

8. In a letter dated October 16, 2017 (attached), I expressed support for this SLN registration in the strongest possible terms. As stated in my letter: “It may not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida’s iconic citrus industry.” Accordingly, I urged that “no effort be spared in registering aldicarb again for citrus in Florida.”

9. I write this Affidavit to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida today.

10. Aldicarb is a unique crop management tool that provides a suite of benefits that no other registered product provides. As I noted in my October 16, 2017 letter, “[t]here is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right.”

11. Aldicarb is applied to the soil where it is absorbed by the tree roots and works systemically. As a result, aldicarb provides continuous pest control over an extended period of time, on the order of 90-120 days. At the same time, aldicarb is known to increase root growth, which promotes greater tree health and can lead to larger and more abundant fruit. Our research

cited below from a large scale replicated experiment in a commercial orange grove confirmed increased yield from trees treated with aldicarb. Stansly, P. A., and R. E. Rouse. 1994.

Pest and yield responses of citrus to aldicarb in a flatwoods grove. Proceedings of the Florida State Horticultural Society 107: 69-72.

12. Aldicarb applied through granular applicators below the soil surface has well established integrated pest management and environmental advantages over pesticides that are repeatedly applied through foliar sprays. AgLogic 15 G aldicarb is directly applied into the soil where it is absorbed by the roots, and works systemically against a broad range of pests. As a result, it does not have the same adverse impact as many foliar insecticide sprays on pollinators and other “beneficials” (*e.g.*, wasps, lady beetles, lace wings, and spiders) – which are key to effective integrated pest management programs. The safeguards and stewardship programs that have been adopted over the years for aldicarb provide additional assurance that aldicarb can be used on citrus safely and effectively without harming human health or the environment.

13. The insecticides currently available to citrus growers are, for the most part, applied by ground or aerial spray which may be repeated every 3-4 weeks. Rain events – which are not infrequent during the growing season in Florida – can rapidly wash away these residues, further reducing efficacy. In contrast, once aldicarb is absorbed by the tree roots it will remain active for several months.

14. One of the key classes of insecticides used to control ACP are the neonicotinoids, most notably, imidacloprid and thiamethoxam. These systemic products are typically applied as soil drenches to protect young trees from ACP. Unfortunately, resistance to these products has become widespread in Florida citrus underscoring the urgent need for other another systemic chemistry such as aldicarb – to be made available to citrus growers.

15. Foliar sprayed insecticides also can adversely affect beneficial insect populations, leading to outbreaks of other pest populations, including rust mites and aphids. Aldicarb is effective against psyllids, and both citrus rust mites and aphids, eliminating the need for 2 or more foliar sprays.

16. Another problem faced by citrus growers today is citrus canker. To control canker, growers typically apply a copper-based fungicides at regular intervals. Unfortunately, copper inhibits beneficial mites that control rust mites. As a result, rust mites are a significant problem in many citrus groves where copper has been applied to combat canker. Again, aldicarb is highly effective in providing residual control of rust mites reducing the need for additional sprays.

17. As I noted in my support letter, Florida's iconic citrus industry is in a life or death struggle with HLB for survival. Growers face a host of pest problems, most importantly ACP/HLB, but also rust mites, canker, nematodes, aphids, and others. Hurricane Irma has only exacerbated the difficulties growers now face. In these dire circumstances, growers need more and better management tools, particularly in the face of growing ACP resistance to the neonicotinoids. Aldicarb – a carbamate with a different mode of action– has a proven track record with the Florida citrus industry by providing broad control of psyllids and other important pests while enhancing root growth and fruit production. For all these reasons, I urge the Department to approve an SLN registration for AgLogic 15GG.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on 21 May 2018.

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Philip A. Stansly, Ph.D.

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF WALTER T. JERKINS, JR.**

I, Walter T. Jerkins, Jr., do solemnly swear as follows:

1. I am the President of Premier Citrus and Premier Citrus Management, 635 66<sup>th</sup> Ave. SW, Vero Beach, FL, 32968.

2. Premier is among the largest citrus producers in Florida, managing over 20,000 acres of citrus groves, located in seven (7) counties in Florida. Premier's fresh fruit package house also is one of the largest in Florida.

3. I have more than 40 years of experience in the citrus industry. After graduating from the University of Florida with a major in agriculture in 1975, I worked for about four (4) years at Southern Fruit Distributors, a Florida grower/processor. In 1980, I joined Blue Goose Growers, one of the state's largest grove management company, where I worked for more than 32 years. In 2013, I joined Premier as its President.

4. I am a founding member of Citrus Research and Development Foundation, Inc. (CRDF) and was its first President, a position I held for nine years (2011-Jan. 2018). The CRDF is headed by a 13-member Board of Directors that includes individuals from industry, academia, and government. The CRDF raises money and issues research grants to help companies develop products to combat citrus greening disease (HLB). Through my involvement in CRDF and knowledge of its research, I am well informed about the pest control products currently available

to the citrus industry and products still in the development pipeline. Aldicar is the best tool for providing more fruit, enhancing yield, and tree health that I have used since entering the business in 1973. Indeed, it is very unique in terms of predictive yield response. I believe the citrus industry decline accelerated after aldicarb was pulled from the market.

5. I am not aware of any other single product or combination of products that provides the same yield improvement potential to the industry that aldicarb could provide, as discussed below.

6. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.

7. Premier enthusiastically supports AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 11, 2011 (attached), I affirmed Premier's strong support for this SLN registration.

8. The purpose of this Affidavit is to provide further explanation why aldicarb is urgently needed by citrus growers.

9. I have many decades of experience with the use of aldicarb on citrus. During the three decades that I was with Blue Goose Growers, we regularly used aldicarb (Temik) in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently had very positive experiences with aldicarb, which we regarded as a key tool in our arsenal to control insect pests and promote tree growth and fruit production. Year after year we found that when we used aldicarb, trees were healthier and more productive.

10. Premier also used aldicarb very regularly on virtually all of its citrus acres during the many years it was available. Based on my surveying of our grove managers here, Premier's positive experiences with aldicarb were very similar to those of Blue Goose Growers.

11. I have had discussions about aldicarb with many other growers in the industry over the years, including while I was CRDF President. The nearly universal consensus among citrus

producers is that aldicarb is a uniquely valuable product that offers a combination of benefits not provided by any other product or combination of products.

12. Aldicarb provides good control of a broad array of insect pests, including nematodes, rust mites, psyllids, and others. At the same time, aldicarb also provides a marked yield response. As noted in my October 2017 letter, in the years aldicarb was available, it “promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests.” This “PGR effect” has been widely observed by growers throughout the citrus industry. The positive impact of aldicarb on tree health and citrus production is far greater than that provided any other product or combination of products.

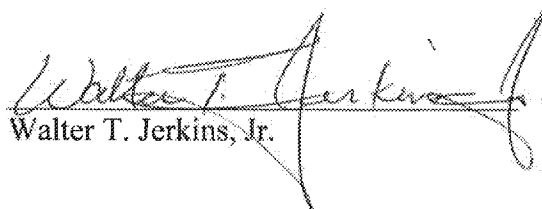
13. The yield response from the use of aldicarb is robust, resulting in a *sustained* yield increase of at least 15-20%. In practical terms, that means an increase in production from, say, 300 to 350 boxes/acre. The extra 50 boxes represents \$400-\$600/acre in additional revenues. Thus, the use of aldicarb provides a significant, positive return on investment.

14. The need for aldicarb is even more urgent now, because of citrus greening disease (HLB), spread by the Asian citrus psyllid. At best, registered chemistries currently available that are labeled for psyllid control may be marginally effective at keeping the disease level static, or slowing the decline of diseased trees. But these other chemistries do nothing to promote tree health and vigor, or improve yields. In contrast, decades of experience has proven that aldicarb consistently improves fruit size, color and shape and overall productivity – precisely the effects that are so desperately needed now by the citrus industry.

15. For all these reasons, Premier urges the Department in the strongest possible terms to approve AgLogic’s application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.

  
Walter T. Jerkins, Jr.



**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF JOHN GOSE**

I, John Gose, do solemnly swear as follows:

1. I am General Manager for Lykes Bros, Inc., 7 Lykes Road, Lake Placid, FL, 33852.
2. Lykes Bros a long-time major player in the Florida citrus industry. We have over 6,000 acres of active citrus groves. Over the last five years we have lost 50% of our citrus acreage due to Citrus Greening.
3. I have more than 40 years of experience in the citrus industry. My family owned citrus groves and I worked in those groves as a teenager. After I graduated from the University of Florida with a degree in agriculture/fruit crops in 1981, I accepted a position at Lykes Bros. I have worked at Lykes Bros in citrus management my entire career.
4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
5. We at Lykes Bros enthusiastically support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 2, 2011 (attached), I affirmed Lykes Bros' strong support for this SLN registration. As stated in my letter: "aldicarb ... is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."

6. The purpose of this Affidavit is to provide further explanation why citrus growers need aldicarb back in their toolbox.

7. Lykes Bros regularly used aldicarb (Temik) in citrus groves we managed for more than two decades, until it was voluntarily withdrawn from the market by Bayer in 2010. We consistently had very positive experiences with aldicarb. Based on our experiences, we consider aldicarb a uniquely valuable product that offers a combination of benefits not provided by any other registered product or combination of products.

8. Aldicarb provides control of many economically important pests, including psyllids, nematodes, and rust mites, among others. The control provided by aldicarb, which is applied to the soil and is absorbed by tree roots, lasts up to 3-4 months, whereas most foliar sprays to control insect pests have to be repeated every 3-4 weeks. As a result, if we were able to use aldicarb, we would be able to reduce the number of foliar sprays by at least 2-3.

9. A serious drawback of foliar insecticides is that they can wipe out pollinators and other “beneficials” (wasps, lacewings, spiders, etc.) that help to control rust mites and other pests. Because of their adverse impacts on pollinators, foliar insecticide sprays cannot be used during bloom time. Aldicarb can fill this gap, since the control that a single in soil application of aldicarb provides is long-lasting and can extend through the bloom period. Moreover, in our experience, aldicarb (which is not sprayed) does not have the adverse impacts on beneficials as foliar insecticides.

10. In addition to providing good control of many pests for an extended period, aldicarb also promotes greater root growth and increases fruit production. During the years we used aldicarb, we consistently saw a very good growth response. Most important, the use of aldicarb resulted in significantly *higher pounds of solids per box*, producing a very positive net economic return.

11. The need for aldicarb is particularly urgent now, because citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the citrus industry. The HLB infection restricts the health of the phloem, which in turn compromises the vigor of the root

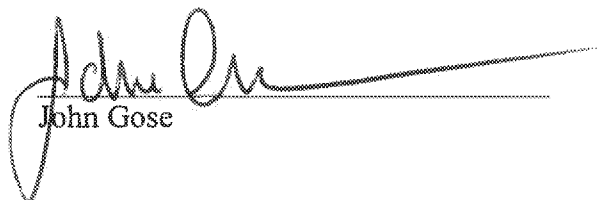
system. Aldicarb, which is water soluble, would travel up in the xylem and not be compromised by the HLB infection. Aldicarb reduces the number of foliar sprays needed, including during the critical bloom season when use of other sprays is not permitted. At best, many of the foliar spray insecticides we are currently using against ACP are only marginally effective, and resistance is increasing. The tool box for controlling ACP is very restricted. In the past we used aldicarb throughout our production groves. If available now, Aldicarb would provide us a much needed new tool to fight ACP, while at the same time help us to manage increasing neonic resistance. Aldicarb should also increase pounds solids, which is critically important in the face of declining fruit production by trees infected with HLB.

12. Another serious pest problem associated with citrus production in our groves is root weevils. Citrus greening disease interferes with the transport of sugars and other nutrients from the leaf canopy to the roots through the phloem. To compensate for this, we add nutrients to the soil to help feed the root system. Doing this, however, also supports root weevils (and nematodes). It is not an overstatement to say that root weevils are now a huge problem for Lykes Bros. Aldicarb is needed to combat this problem. When we were able to use aldicarb, we had few problems with root weevils. Root weevil larvae need moisture to come up from the soil and start feeding on the roots. When it was available, we applied aldicarb to soil in November and December. This application timing was perfect for knocking out root weevils before the next fruiting season.

13. For all these reasons, Lykes Bros urges the Department in the strongest possible terms to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 17, 2018.

  
John Gose

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**AFFIDAVIT OF WILLIAM G. ROE II**

I, William (Bill) G. Roe II, do solemnly swear as follows:

1. I am Vice President and Chief Operating Officer for Wm. G. Roe & Sons, Inc. My family has worked in the citrus industry for nearly a century. Wm. G. Roe & Sons, Inc., founded by my grandfather in 1927, is a long-standing player in the Florida citrus industry. We own, manage, or operate approximately 3,000 acres of citrus in various locations across the citrus belt. Our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are perennially one of the top 10 packers in the state. We are also the leading shipper of tangerines in Florida and our brand, Noble, is highly respected in the markets. We have the only private citrus plant breeding program in Florida, which specializes in tangerines.

2. I have more than 40 years of experience in the citrus industry. After graduating from Vanderbilt University in 1975, and taking courses in citriculture at Lake Alfred Citrus Research Station, FL, I began working full-time at Wm G. Roe & Sons in 1976. Prior to that, I worked part-time as a tractor driver and mechanic at the company, starting when I was in high school. I have held several positions at the company, from grove area manager to eventually production manager, a position I held for nearly 20 years. I also worked as our packing house manager for 10 years.

3. I served as President of the Florida Citrus Managers Association from 1986-87, and after appointment to the Florida State PRC, was its Chairman in 1996.

4. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. As stated in my letter dated September 28, 2017 (attached), Wm. G. Roe & Sons strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.

6. Today in Florida we have the benefit of a host of new insecticide chemistries for topical application through spraying. At the same time, Florida has been beset with the citrus greening disease (HLB,) which has manifested itself in a most virulent fashion. Most of the new chemistries are targeted on the vector that spreads HLB, the Asian citrus psyllid. Unfortunately, these chemistries are used as foliar sprays and are generally quite toxic to honeybees and other beneficial insects that have been a key part of integrated pest management (IPM) programs used by citrus managers. In fact, some of the chemistries that are the harshest to beneficials are required to control the foliar citrus pests which develop precisely because of a decimated IPM program. As a result, a serious consequence of topical spraying to control psyllid populations is extreme damage to our beneficial insect populations.

7. This is one of the reasons why aldicarb is so urgently needed now. Unlike the foliar sprays mentioned above, aldicarb is applied to the soil, is absorbed by the roots, and works systemically. Application of aldicarb in the soil versus use of foliar sprays that can wash away when it rains, also gives aldicarb an advantage with residual pest control or longevity. If aldicarb were available, growers could use it to suppress psyllids in the early spring when their populations soar, especially during bloom and pollinator foraging periods when sprays are

prohibited, limited or discouraged. This window of bloom time is critical for both the building of beneficial insect populations and for controlling explosive psyllid populations due to the lush spring flush. Aldicarb is the only chemistry which could be available to do both – suppress psyllids and protect beneficials during bloom time – because of its systemic mode of action.

8. While the discussion in the previous paragraph focuses on psyllids, the same point applies to the various members of the scale family, mealybugs, and to some degree leaf miners. Other pests that require control are rust mites and various members of the spider mite family. These pests are typically controlled with different chemistries than those used for psyllids, but the use of these chemistries for the most part is still discouraged during bloom and bee foraging timeframes. Aldicarb, on the other hand, controls the mite spectrum extremely well, suppresses psyllids, and does not have the same adverse impacts on beneficial insects that foliar insecticide sprays involve. As such, its use in February would significantly diminish topical spraying in the early spring.

9. A phenomena of the past 12 years since citrus Canker has become endemic in the state has been the necessity of spraying copper every 21 days to control Canker lesions on the peel of many varieties. Canker lesions allow secondary infections to occur in the wounds of the fruit's peel, eventually causing the fruit to drop from the tree, so its control is mandatory for commercial growers. Although we have Streptomycin permitted for topical application and which helps, its application does not allow reduced applications of copper during the growing season. On the down side, application of copper creates a favorable micro-climate for mites to harbor on the peel of the fruit, making them quite difficult to control. When the fruit is quite susceptible during the late spring to Canker, the weather is generally hot and dry, which is perfectly suited for mite build-up even without copper deposits on the surface of the leaves and fruit. Aldicarb provides excellent mite control for an extended period during the spring, is not intrusive to either beneficials or honeybees, and accordingly was one of the reasons why most of the fresh fruit industry used aldicarb when it was available.

10. Another important reason why aldicarb is need by citrus growers today is that it promotes tree health and fruit production – what growers have called a PGR (plant growth regulatory) effect. It is hard to quantitatively assess aldicarb's PGR effect for citrus, but its use causes fruit to have enhanced high peel color and both measurably larger and more uniform size. It could be the combination of aldicarb negating the feeding and sucking of plant bugs and its impact on reducing the nematode population simultaneously, but in any case it is the only chemistry I have used in my 42 years in the industry which enhances the tree's performance and which unquestionably enhances the value of the fruit produced.

11. As growers, we are constantly trying to compensate for the much diminished root system caused by HLB by providing additional fertilizer and nutritional elements. Correspondingly, we are having to apply more foliar copper and leaf nutrients which are exacerbating mite populations. Aldicarb would be a most useful tool for the grower community and the environment by virtue of its providing enhanced control of a broad range of pests while enabling the grower to reduce topical pesticides.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April, 27 2018.

  
William (Bill) G. Roe II

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_)  
IN THE MATTER OF \_\_\_\_\_)  
Application of AgLogic Chemicals, LLC \_\_\_\_\_)  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_)  
Registration for \_\_\_\_\_)  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_)  
\_\_\_\_\_)

**AFFIDAVIT OF DAVID OWENS**

I, David Owens, do solemnly swear as follows:

1. I am the Director of Chemical Sales for Alico Citrus, 12010 Hwy 70, Arcadia, FL, 34266. I have held this position since the end of 2015. My responsibilities at Alico include purchasing from, and liaising with, suppliers of pesticides, fertilizers, and other chemical products for use in citrus.

2. Alico, based in Fort Myers, FL, is among the largest citrus growers in the United States, with some 32,000 acres of citrus groves. In 2017, Alico was the country's largest citrus producer, producing 7.6 million boxes of fruit.



3. Prior to joining Alico, I worked in sales for Rhone Poulenc, and its corporate successors, Aventis and Bayer, for more than 20 years. During this time, I was responsible for the largest sales territory in Florida for the product, Temik, containing aldicarb. My work included talking with growers, interfacing with extension service scientists, and dealing with issues relating to registration, product application, stewardship and other matters. Overall, I have more than 35 years of experience with the citrus industry.

4. I am aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

5. We at Alico strongly support AgLogic's SLN application for use of aldicarb on citrus. In a letter dated October 10, 2017 from Steve Ryan, President of Citrus Operations (attached), Alico affirmed its support for an SLN registration for aldicarb for citrus. As stated in that letter: "It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications. .... It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated."

6. I and Alico stand by these statements in the October 10, 2017 letter. The purpose of this Affidavit is to explain further why aldicarb is urgently needed by citrus growers, as it fills a need not met by any other product, or combination of products, currently available.

7. Alico has a long, positive history with aldicarb. Alico regularly used aldicarb (Temik) in its citrus groves for at least 20 years, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. Alico's very favorable experiences with aldicarb that spanned decades are the foundation for its strong support for an SLN registration for aldicarb.

8. Aldicarb is a unique pesticide control tool that provides a combination of benefits not provided by any other available product or group of products. It controls psyllids, nematodes, rust mites and many other insect pests. At the same time, it also promotes root growth, tree

growth, and tree health. As a result of increased tree growth, aldicarb increases fruit size and overall citrus production. It is these synergistic effects of aldicarb that make it indispensable to the future health of the citrus industry in Florida. These synergetic benefits cannot be obtained through the use of any single other registered pesticide or combination of registered pesticides.

9. No other product on the market has the same positive effects on tree health and fruit production that Alico – and many other citrus growers – have obtained with the use of aldicarb. During the years Alico used Temik/aldicarb, it realized a very favorable return on its investment in the use of the product year after year.

10. The positive effects of aldicarb on tree health and fruit production are particularly needed in the face of the citrus greening (HLB) epidemic. There is a current, critical need to be able to use aldicarb to help retard the year-to-year decline in fruit size and fruit production we are seeing in trees infected with HLB.

11. Prior to its withdrawal from the market, aldicarb was successfully used to control psyllids, the vector that carries HLB. As reflected in Florida citrus production data, aldicarb use is strongly, positively correlated with increased citrus production. Since aldicarb was taken off the market in 2010, citrus production has plummeted.

12. Although there are other products that are labeled for psyllid control, Alico has found that the efficacy of these products for psyllid control has plateaued in recent years. There is great concern at Alico and in the industry that resistance to these chemistries, particularly “neonics” such as imidacloprid, is growing. This is another reason why aldicarb is urgently needed at this time. Aldicarb, a carbamate class pesticide, provides a different mode of action and its use would greatly assist in managing psyllid resistance.

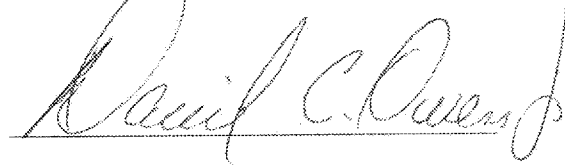
13. Aldicarb also provides well established environmental benefits. Because it is injected into the soil, it poses far less risk of harm to pollinators and other non-target beneficial insects than alternatives that are applied by foliar spray. The ability to use aldicarb would materially reduce the number of foliar applications of pesticides needed to control early season psyllids, and rust mites, greatly reducing the potential adverse impacts of harsher sprays on

beneficials and the environment. Aldicarb also has a much longer residual effect because it is distributed under the soil, and works best in wet soil. In contrast, foliar applications wash out in Florida's frequent rains and have to be repeated more often. It is fair to say that aldicarb is unique when it comes to controlling pests, while also increasing tree vigor and yields. There are also well established benefits of aldicarb on young trees. Aldicarb gives increased root flushes, and promotes the growth of young non-bearing and bearing trees.

14. For all these reasons, I urge the Department to approve AgLogic's application for a SLN registration for aldicarb on citrus.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 29, 2018.

A handwritten signature in cursive script, appearing to read "David C. Owens", written over a horizontal line.

David Owens

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF TIMOTHY J. DOOLEY**

I, Timothy J. Dooley, do solemnly swear as follows:

1. I am the Vice President and General Manager of Blue Goose Growers, a citrus grove and crop management company based in Ft. Pierce, Florida. I have worked for Blue Goose Growers for approximately 27 years.
2. Blue Goose Growers manages approximately 10,000 acres of citrus trees.
3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.
4. As stated in my letter dated October 11, 2017 (attached), Blue Goose Growers strongly supports AgLogic's SLN application. Our strong support for this SLN registration is based on our extensive experiences with the use of aldicarb on citrus spanning some three decades, up until it was voluntarily withdrawn from the market by Bayer in 2010. The purpose of this Affidavit is to provide additional explanation why aldicarb is so urgently needed by citrus growers in Florida.
5. Citrus growers in Florida, including groves under Blue Goose Growers' management, have a long history of using aldicarb (Temik) successfully to control pests and threaten Florida's citrus crops.

6. Since aldicarb was removed from the market, the health of the Florida citrus industry has declined immensely. HLB is ravaging the industry, and growers are suffering from declining tree health and decreased fruit size and yield.

7. Florida citrus growers urgently need aldicarb to fight HLB, improve declining tree health and increase fruit size and yield. Before aldicarb was removed from the market, I observed how it had a PGR effect, which improved tree health and increased fruit size. Blue Goose Growers have conducted their own field trials over the past 25 years. As a result of conducting our own field trials, we observed a direct correlation between use of aldicarb and increased fruit size.

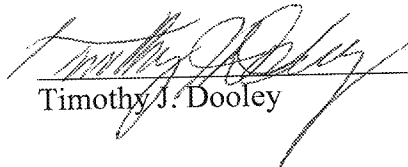
8. In addition, aldicarb offers longer residual control of rust mites. Control of mites by products available on the market today generally does not last for more than three to four weeks. As a result, growers reapply pesticides which, increases production costs, increases tank mix complexity, and increases phytotoxicity to the crop.

9. In contrast, a single application of aldicarb offers a 90-120 day control period for rust mites. Aldicarb also controls nematodes for three to four months, while products currently available must be re-applied monthly if not more often.

10. There is no product or combination of products available to citrus growers today that offers the benefits of aldicarb. In addition to the longer residual control it provides, it is critically needed because it controls a wide range of pests, enhances tree health, and increases fruit production.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May, 17, 2018.

  
Timothy J. Dooley

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF )

Application of AgLogic Chemicals, LLC )

For FIFRA § 24(c), Special Local Needs (SLN) )

Registration for )

AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
\_\_\_\_\_)

**AFFIDAVIT OF MARVIN KAHN**

I, Marvin Kahn, do solemnly swear as follows:

1. I am the primary owner of Kahn Citrus Management (KCM), based in Sebring, FL. KCM manages thousands of acres of citrus in Polk, Highlands, Hardee and DeSoto counties, FL.

2. My father entered the citrus industry when he purchased his first orange grove in the 1930s. I have been a part of the citrus industry my entire working life, and have more than 60 years of experience in citrus management. (I just celebrated my 85<sup>th</sup> birthday.)

3. I am aware that AgLogic Chemicals, LLC is applying to the Florida Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus in Florida.

4. As stated in my letter dated November 3, 2017 (attached), we at KCM fully support AgLogic's SLN application. Our support for this SLN registration is based on decades of favorable experiences that we have had with aldicarb (Temik), up until the end of 2010, when it was voluntarily withdrawn from the market by Bayer.

5. The purpose of this Affidavit is to explain further why aldicarb is so urgently needed by KCM and other citrus growers in Florida.

6. Aldicarb provides a unique combination of benefits. Aldicarb is applied to the soil, is absorbed in the roots, and works systemically to control a broad range of pests, including

nematodes, rust mites, psyllids, aphids and many other insects. As a result, unlike most other chemistries which are applied topically, aldicarb has minimal impacts on honeybees and other beneficials. At the same time, aldicarb significantly improves fruit size and tree health. In my experience, groves that were treated with aldicarb prior to 2010 still look better – and are healthier – than groves that were not treated with aldicarb. No other product, or even combination of products, comes close to providing comparable, multiple benefits provided by aldicarb.


7. Citrus greening disease (HLB), spread by the Asian citrus psyllid, is ravaging the citrus industry in Florida. Trees infected with HLB decline over time, progressively producing less and less fruit, and the fruit these trees produce are smaller and less rounded. Growers need as many tools as possible to combat this crippling disease. Aldicarb represents a powerful tool to fight HLB. Not only does aldicarb suppress psyllid populations, but it also improves tree health and fruit size, the very effects that are so desperately needed at this time.

8. Another pest problem of increasing importance to the citrus industry is rust mites. Aldicarb controls mites for longer periods of time than most alternatives. Whereas other chemistries generally achieve control for 3-4 weeks, aldicarb provides control for 60-90 days.

9. In summary, if aldicarb were available, growers would be able to control psyllids, rust mites, and other pests with fewer foliar sprays involving harsher chemistries. Overall, trees would be healthier and more productive, and there would be less damage to honeybees and other beneficials.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on April \_\_, 2018.

  
\_\_\_\_\_  
Marvin Kahn

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

\_\_\_\_\_) )  
IN THE MATTER OF \_\_\_\_\_) )  
Application of AgLogic Chemicals, LLC \_\_\_\_\_) )  
For FIFRA § 24(c), Special Local Needs (SLN) \_\_\_\_\_) )  
Registration for \_\_\_\_\_) )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus \_\_\_\_\_) )  
\_\_\_\_\_)

**AFFIDAVIT OF CODY LASTINGER**

I, Cody Lastinger, do solemnly swear as follows:

1. I hold the position of Manager – Horticultural Services for Consolidated Citrus, LP (“Consolidated”), 63 Barn Road, Venus, FL 33960. Consolidated is among the largest citrus producers in the United States, with some 30,000 acres of citrus groves.

2. I graduated from the University of Florida in 2013 with a Master’s in Agronomy and Weed Science. I received a second Master’s in Aquatic Plant Management from the University of Florida Gainesville in 2017. I became Manager – Horticultural Services at Consolidated very recently, after the former long-time Manager, Michael J. Stewart, recently retired.

3. I am aware that AgLogic is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for AgLogic 15GG aldicarb pesticide for use on citrus in Florida.

4. In a letter dated October 20, 2017 (attached), former manager Michael Stewart expressed Consolidated’s strong support for this SLN registration. This support is based on Consolidated’s many decades of favorable experiences with aldicarb (brand name, Temik), up through 2010, when it was voluntarily cancelled by Bayer. As stated in our October 20, 2017 letter: “When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective

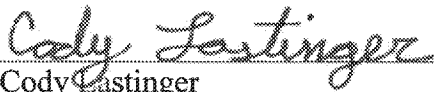


pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields.”

5. The need for aldicarb is particularly urgent now. Citrus greening disease (HLB), spread by the Asian citrus psyllid (ACP), is ravaging the Florida citrus industry. Growers need more management tools to combat this terrible disease. Aldicarb not only provides good control of psyllids, but also enhances root growth, tree health, and fruit production. These are precisely the properties that we need now to fight HLB.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 23, 2018.

  
Cody Lastinger

BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES

)  
IN THE MATTER OF )  
Application of AgLogic Chemicals, LLC )  
For FIFRA § 24(c), Special Local Needs (SLN) )  
Registration for )  
AGLOGIC 15GG (Aldicarb) for Use on Citrus )  
)

**AFFIDAVIT OF ROBERT H. BARBEN AND JOHN P. BARBEN**

We, Robert H. Barben and John P. Barben, do solemnly swear as follows:

1. I, Robert H. Barben, am President and I, John P. Barben, am Vice President, of Robert J. Barben, Inc., 21 East Pine Street, Avon Park, FL 33825. Robert J. Barben, Inc. is a family business that traces its origins back to the 1920s. We have been in the business of growing and managing citrus for many decades. We currently manage about 1800 acres of citrus located in four counties in Florida.

2. We are aware that AgLogic Chemicals, LLC is applying to the Department of Agriculture and Consumer Services for a Special Local Needs (SLN) registration for its aldicarb product, AgLogic 15GG, for use on citrus.

3. We at Robert J. Barben, Inc. strongly support AgLogic's SLN application for the use of aldicarb on citrus. In a letter dated October 13, 2017 (attached), we affirmed our unqualified support for this SLN registration.

4. The purpose of this Affidavit is to provide further explanation as to why aldicarb is urgently needed by Florida citrus growers today.

5. Our company has extensive experience with the use of aldicarb on citrus. During the 2-3 decades that aldicarb (brand name, Temik) was available to us, we used it regularly in citrus groves we managed, until it was voluntarily withdrawn from the market by Bayer at the end of 2010. We consistently saw very positive results with aldicarb. We found that when we used aldicarb, trees were healthier and more productive.

6. The need for aldicarb is particularly urgent now, because of the serious pest problems that citrus growers face today, and the short-comings of the available tools to manage them.

7. The Number 1 problem facing citrus growers, of course, is citrus greening disease (HLB), spread by the Asian Citrus Psyllid (ASP). Robert J. Barben, Inc. is fighting this disease by rotating applications of several different insecticides with different modes of action, including neonicotinoids, pyrethroids, and organophosphates (OPs). These chemicals are generally sprayed on the tree foliage, 10-12 times per year, in both pre-bloom and post-bloom periods. At best, however, these chemistries are only marginally effective in controlling psyllids. Over time, citrus trees continue to become infected, decline and die. Our citrus groves, for example, have declined by more than 66% since the onset of HLB.

8. A serious drawback of foliar insecticides to suppress psyllids is that they decimate populations of "beneficials" (lady beetles, lace wings, spiders, etc.) that help control other insect pests, including aphids and rust mites. In recent years, rust mites in particular have emerged as another serious problem for citrus growers, including Robert J. Barben, Inc.

9. We desperately need aldicarb back in our toolbox, especially to combat rust mites. When aldicarb was available, we found that it did an outstanding job of controlling rust mites. Unlike foliar sprays, we never saw adverse impacts on beneficials when we used aldicarb. Aldicarb is applied to the soil, not topically, and works systemically, so there is far less direct

exposure to beneficials with aldicarb.

10. The addition of aldicarb, which is a carbamate with a different mode of action, would be very helpful to citrus growers in managing pesticide resistance.

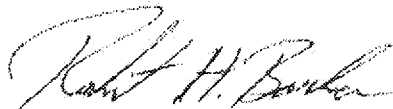
11. If aldicarb were available, we would apply it to the soil in winter months. This would enable us to reduce the number of foliar sprays by at least 2-3 during the spring months, which would reduce adverse impacts on beneficials.

12. Another reason why we urgently need aldicarb back is that it aldicarb increases root growth and fruit production. In our experience, using aldicarb is like giving the tree a steroid; the trees are healthier and there is a very definite growth response. Even more important economically, aldicarb increases the *pounds solids* produced by the tree. No other product compares to aldicarb in stimulating tree growth and fruit production.

13. In summary, aldicarb offers a unique combination of benefits not offered by any other single registered product or combination of registered products. These benefits include broad, long-lasting control of rust mites, minimal impacts on beneficials, and increased tree health and fruit production. These benefits are urgently needed by citrus growers now, more than ever. For these reasons, Robert J. Barben, Inc. urges the Department to approve an SLN registration for AgLogic 15 GG.

We declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 30, 2018.



Robert H. Barben



John P. Barben

**BEFORE THE  
FLORIDA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

_____	)
IN THE MATTER OF	)
Application of AgLogic Chemicals, LLC	)
For FIFRA § 24(c), Special Local Needs (SLN)	)
Registration for	)
AGLOGIC 15GG (Aldicarb) for Use on Citrus	)
_____	)

**AFFIDAVIT OF BETH E. MILESON, PH.D.**

I, Beth E. Milesen, do solemnly swear as follows:

1. I hold the position of Principal Scientific Consultant, Team Leader, Toxicology at Technology Sciences Group, Inc. (TSG), based in TSG's office at 1101 17<sup>th</sup> Street, N.W., Suite 500, Washington, D.C., 20036. I have worked at TSG since 2001,
2. TSG is a part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG).
3. A copy of my Curriculum Vitae is attached. As reflected therein, I received a Ph.D. in Toxicology from the University of North Carolina in Chapel Hill in 1989. I also hold a Bachelor of Science in Biology/Zoology and Master of Science in Biology from George Washington University, as well as a Masters in Business Administration from George Mason University.
4. I am and have been a board-certified toxicologist, otherwise known as a Diplomate of the American Board of Toxicology, continuously since 1996.
5. I have more than 20 years of experience designing, conducting and reviewing toxicological risk assessments.
6. AgLogic asked me to conduct an acute aggregate dietary exposure and risk assessment for aldicarb using the Dietary Exposure Evaluation Model software with the Food

Commodity Intake Database (DEEM-FCID) using methods identical to those used by the U.S. Environmental Protection Agency (US EPA) in its assessment in 2016.<sup>1</sup>

7. The exposure assessment I conducted for AgLogic was intended to estimate potential exposure of the general US population and all sub-populations to aldicarb assuming that 20% of the US citrus crop is treated with aldicarb. For this assessment I used as a starting point the basic data files and assumptions provided by the US EPA in 2016. In addition to the assumed use of aldicarb on 20% of the citrus crop, two assumptions in my aggregate exposure assessment differed from the US EPA: (1) The US EPA assumed that 100% of the imported crops supported by tolerances are treated with aldicarb, while I assumed that no aldicarb residues were in/on imported crops because aldicarb is not registered anywhere outside the US. (2) The aldicarb residue levels in water that I used in the exposure assessment were provided in a report prepared by Waterborne Environmental for AgLogic.<sup>2</sup> The DEEM modeling methods I used were identical to those used by the US EPA, such that my results would be expected to match the US EPA, given the same assumptions as described above.

8. The acute aggregate dietary exposure and risk assessment that I conducted for AgLogic revealed that estimated aldicarb exposures for the general US and all sub-populations were well below the Reference Dose for acute exposure.<sup>3</sup> Based on my aggregate exposure assessment conducted using DEEM-FCID modeling and US EPA methods, the use of AgLogic 15GG as directed on the revised label, and including use on all citrus crops in Group 10, results

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<sup>1</sup> US EPA, 2016. Memorandum: Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessments for Registration Review Risk Assessment. From: Ideliz Negrón-Encarnación, to: Susan Bartow. PC Code: 098301, DP Barcode: D430197, Office of Pesticide Programs, Office of Chemical Safety and Pollution Prevention, US Environmental Protection Agency, 3/28/2016. 34 pages.

<sup>2</sup> Ritter, A.M. 2017. Aldicarb: Drinking Water Exposure Assessment. Unpublished report by Waterborne Environmental Inc. Study No.: 245.01. November 14, 2017. 22 pages. MRID 50549101.

<sup>3</sup> Milesen, B.E. 2017. Aldicarb. Acute Aggregate Dietary (Food and Drinking Water) Exposure and Risk Assessment for Proposed Uses. Unpublished report by Technology Sciences Group, Inc. Document No.: 20170230. December 28, 2017. 27 pages. MRID 50549102.

in acceptable aggregate dietary and drinking water exposures for the general US population and the highest exposed subpopulations.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 24, 2018.

A handwritten signature in cursive script, appearing to read "Beth E. Miles".

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Beth E. Miles

# Curriculum Vitae Beth E Milesen

## **Beth E. Milesen, Ph.D., DABT**

Technology Sciences Group Inc.

Washington, DC 20036

Phone: (202) 828-8956

email: bmilesen@tsgusa.com

## **EDUCATION**

MBA, George Mason University, Fairfax, VA, (2013)

PhD, Toxicology, University of North Carolina, Chapel Hill, NC (1989)

MS, Biology/Zoology, George Washington University, Washington, DC (1984)

BA, Biology, George Washington University, Washington, DC (1981)

## **PROFESSIONAL EXPERIENCE**

### **Technology Sciences Group Inc. (TSG)**

**2001 to Present**

*Technology Sciences Group Inc. is part of Science Group plc which is listed on the AIM market of the London Stock Exchange (AIM: SAG), and provides state, federal and international expertise on a wide range of scientific and regulatory issues. With experts in regulatory affairs, chemistry, toxicology, environmental fate and risk assessment, TSG provides services in support of the development, registration, compliance and defense of chemically related products. Clients include chemical, pesticide, consumer product, food, personal care and animal health companies, as well as industry groups, trade associations, and law firms.*

### **Principal Scientific Consultant, Team Leader**

#### **Responsibilities include:**

- Create comprehensive toxicology and risk assessment strategies to inform clients' business decisions and achieve their regulatory goals;
- Design and conduct human health and ecological risk assessments to support product stewardship, registrations and certifications;
- Meet with federal and state officials and stakeholder groups to discuss and resolve scientific issues;
- Design toxicology testing programs and testing strategies to support new and existing products;
- Support TSG management and staff in scientific and administrative matters.
- Clients include large producers and marketers of consumer products, chemicals and pesticides, as well as a number of small businesses, biotech firms, and trade associations.

### **ARCADIS**

**2000 to 2001**

*ARCADIS is an international company that provides consultancy, design, engineering and management services in the fields of Infrastructure, Water, Environment and Buildings. With more than 22,000 employees and more than \$3.3B in revenues the company has an extensive international network that is supported by strong local market positions.*

## Curriculum Vitae Beth E Milesen

### Principal Scientist

#### Responsibilities included:

- Develop toxicological and human health risk assessments for site-specific and chemical-specific scenarios,
- Develop and maintain client relationships,
- Mentor junior staff.

### **ILSI Risk Science Institute**

**1996 to 2000**

*The International Life Sciences Institute (ILSI) is a nonprofit, worldwide organization whose mission is to provide science that improves public health and well-being. It achieves this mission by fostering collaboration among experts from academia, government, and industry on conducting, gathering, summarizing, and disseminating science. Its activities focus primarily on nutrition and health promotion; food safety; risk assessment; and the environment.*

### Senior Scientist

#### Responsibilities included:

- Design and implement programs to advance the scientific basis of risk assessment;
- Create proposals outlining goals and objectives, strategic plans and budgets necessary to complete projects;
- Collaborate with scientists from U.S. and international agencies and organizations including the U.S. Environmental Protection Agency, Food and Drug Administration and Organization for Economic Cooperation and Development;
- Direct and chair working groups composed of scientists from academia, industry, government and public interest groups and stimulate them to reach consensus on difficult scientific issues.

#### Projects included:

1. Develop principles to determine what constitutes a common mechanism of toxicity;
2. Develop guidance for the design and interpretation of studies to characterize acetylcholinesterase activity in the peripheral nervous system;
3. Develop a framework for cumulative risk assessment; and
4. Evaluate experimental methods to identify and characterize developmental neurotoxicity.

### **NC Department of Environment & Natural Resources**

**1992 to 1996**

*The North Carolina Department of Environment and Natural Resources (DENR) Division of Air Quality (DAQ) works to protect and improve outdoor, or ambient, air quality in North Carolina for the health, benefit and economic well-being of all. To carry out this mission, the DAQ operates a statewide air quality monitoring network to measure the level of pollutants in the outdoor air, develops and implements plans to meet future air quality initiatives, assures compliance with air quality rules, and educates, informs and assists the public with regard to air quality issues.*

### Toxicologist

#### Responsibilities included:

- Design, conduct, and interpret large-scale ambient sampling studies used to characterize concentrations of toxic air pollutants and assess citizen exposure and risk,
- Direct the DENR Secretary's Scientific Advisory Board on Toxic Air Pollutants (SAB),
  - Work with scientists from research institutions, universities, government and industry;
  - Identify toxic air pollutants (TAPs) of concern to North Carolina;



## Curriculum Vitae Beth E Milesen

- Conduct risk assessments for TAPs based on primary literature.

### **Projects included:**

1. Design and direct large-scale ambient monitoring studies to measure TAPs emitted by petroleum terminals, wood furniture manufacturing facilities and polyurethane foam producing facilities;
2. Assess potential human exposure to emissions from hazardous waste-burning incinerators, phosphate mining operations, petroleum terminals and furniture manufacturing facilities based on measured ambient levels and modeled concentrations of TAPs;
3. Prepare risk assessments and derive acceptable ambient levels (AALs) for many toxicants, including, allyl chloride, toluene diisocyanate, methylene chloride and formaldehyde.

### **Duke University Medical Center**

**1989 to 1991**

*Duke University has about 13,000 undergraduate and graduate students and a world-class faculty helping to expand the frontiers of knowledge.*

### **Research Associate, Department of Pharmacology and the Center for the Study of Aging**

#### **Responsibilities included:**

- Design and conduct behavioral, neurochemical and neuropharmacologic studies to determine toxicologic mechanisms involved in selective neuronal degeneration that occurs following transient forebrain ischemia, an animal model of stroke;
- Supervise undergraduate and graduate students and technical staff.

#### **Projects included:**

1. Complete three comprehensive studies on neuronal degeneration,
2. Publish the results in the peer-reviewed literature;
3. Fulfill postdoctoral training in sociology, physiology, cardiology, and disease in aging populations.

### **University of North Carolina- Chapel Hill**

**1985 to 1989**

*The University of North Carolina at Chapel Hill prides itself as the nation's first public university, serving North Carolina, the United States and the world through teaching, research and public service.*

### **Doctoral candidate, Curriculum in Toxicology in the Medical School of UNC – Chapel Hill**

#### **Responsibilities included:**

- Conduct research in Dr. Richard Mailman's Neurotoxicology Laboratory on the effects of toxicants on brain dopamine neurotransmission in rats;
- Train and supervise laboratory technicians.

# Curriculum Vitae Beth E Mileson

## **George Washington University**

**1980 to 1984**

*The George Washington University is located in the nation's capital and is an institution with a history of dedication to educating and preparing future leaders.*

### **Master's degree candidate, Department of Biological Sciences**

- Conduct research in Dr. Randall Packer's laboratory to determine how acid-base balance in tropical land crabs is affected by changing environmental temperature;
- Teach human and advanced human physiology to undergraduate students.

### **Undergraduate Student Researcher, Department of Biological Sciences**

- Conduct undergraduate research in the laboratory of Dr. John Burns, to determine the seasonal variation in the reproductive biology of tropical poeciliid fish in the absence of significant seasonal changes in day-length.

## **CERTIFICATIONS**

Diplomate of the American Board of Toxicology, 1996; recertified: 2001, 2006, 2011, 2016

## **PROFESSIONAL MEMBERSHIPS**

Society for Risk Analysis  
Society for Neuroscience  
Society of Toxicology  
American Association for the Advancement of Science

## **INVITED PARTICIPANT IN WORKING GROUPS/TASK FORCES**

- **Workshop:** Risk Assessment Methodologies Workshop on Approaches to Weight of the Evidence Evaluation in Risk Assessment, ILSI Health and Environmental Sciences Institute, December 2006.
- **Working Group:** Food Safety in Europe: Risk Assessment of Contaminants in Food, **European Union Concerted Action and ILSI Europe**, January-October 2000
- **Workshop:** Threshold of Toxicological Concern, **ILSI Europe**, October 1999
- **Workshop:** The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- **Working meeting** for development of Total Risk Integrated Model, **U.S. EPA**, June 1996
- **Workshop:** Mechanism-based Toxicology in Cancer Risk Assessment: Implications for Research, Regulation and Legislation, **National Toxicology Program**, January 1995
- **Working Group:** Board of Scientific Counselors Ad Hoc Working Group to review the Criteria for Listing Carcinogens, **National Toxicology Program**, April 1995
- Task Force on Risk-Based Protocol for Determination of Soil and Water Clean-up Levels, **NC Department of Environment and Natural Resources**, 1995-1996

## Curriculum Vitae Beth E Milesen

- Ad Hoc Committee for Air Quality Standards **ACGIH**, 1995
- Air Toxics Committee member, **State and Territorial Air Pollution Program Administrators (STAPPA) and Association of Local Air Pollution Control Officials (ALAPCO)**, 1994-1996

### INVITED PRESENTATIONS

- *Cumulative Risk Assessment of OP Pesticides in the Diet based on a Probabilistic Method for Exposure Assessment.* at the Asia-Wide Symposium on Risk Assessment of Contaminants in Food, Seoul, South Korea, **Korea Food and Drug Administration**, November 1999
- *A Framework for Cumulative Risk Assessment* at the workshop: The Role of Human Exposure Assessment in the Prevention of Environmental Disease, **National Institute of Health and NIEHS**, September 1999
- *A Comparison of Three Methods to Cumulate Risk Due to Exposure to Multiple Chemicals that Act by a Common Mechanism of Toxicity.* **American Crop Protection Association**, December 1998
- *Common Mechanism of Toxicity, Report of the ILSI RSI Working Group.* **EPA FIFRA Scientific Advisory Panel**, 1998
- *Common Mechanism of Toxicity: A Case Study of OP Pesticides* **EPA OPP Pesticide Program Dialogue Committee**, 1998
- *Procedures and Functions of the Secretary's Scientific Advisory Board on Toxic Air Pollutants.* **NC Legislative Committee on Air Quality** 1996
- *Monthly Briefing* Air Quality Committee of the **North Carolina Environmental Management Commission**, 1995-1996
- *Investigation of Bulk Gasoline Terminals at Paw Creek, Mecklenberg County, NC.* **NC Legislative Environmental Review Committee**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation*, **Press Conference**, January 1994
- *Results of the Bulk Gasoline Terminal Investigation*, **Public Meeting**, February 1994
- *Reconciliation of the NC Regulations for Control of Toxic Air Pollutants with the Federal Clean Air Act of 1990.* **NC Aggregates Association**, May 1993 and **Guilford County LEPC Industry Forum Meeting**, May 1993

### ADDITIONAL PROFESSIONAL ACTIVITIES

- Partner with ILSI Europe on **A European Commission Concerted Action** on Risk Assessment of Chemicals in Food and Diet, April, 2000-February 2001
- Organized and chaired a symposium on Cumulative Risk Assessment at the **Society for Risk Analysis Annual Meeting**, December 1999
- Nominated as a potential member of the **EPA FIFRA Scientific Advisory Panel** (declined due to participation in ILSI activities germane to issues considered by the SAP) October, 1997
- Member of the Editorial Advisory Board, **Reviews in Toxicology**, **IOS Press** (2001).

**FULL LENGTH REFEREED PUBLICATIONS**

1. Milesen, B.E., Packer, R.K., 1986. Hemolymph acid base balance in the terrestrial crab, *Gecarcinus ruricola*, with changing environmental temperature. **Comp. Biochem. Physiol.** 85A:4;715719.
2. Milesen, B.E., Schwartz, R.D., 1991. The use of locomotor activity as a behavioral screen for neuronal damage following transient forebrain ischemia in gerbils. **Neuroscience Letters** 128; 71-76.
3. Milesen, B.E., Lewis, M.H., Mailman, R.B., 1991. Dopamine receptor "supersensitivity" occurring without receptor up-regulation. **Brain Research**, 561; 1-10.
4. Schwartz, R.D., Yu, X., Wagner, J., Ehrmann, M., Milesen, B.E., 1992. Cellular regulation of the benzodiazepine/GABA receptor: arachidonic acid, calcium, and cerebral ischemia. **Neuropsychopharmacology**, 6; 119-125.
5. Milesen, B.E., Ehrmann, M.L., Schwartz, R.D., 1992. Alterations in the GABA-gated chloride channel following transient forebrain ischemia in the gerbil. **Journal of Neurochemistry**, 58; 600-607.
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7. Milesen, B.E., Chambers, J.E., Chen, W.L., Dettbarn, W., Ehrich, M., Eldefrawi, A.T., Gaylor, D.W., Hamernik, K., Hodgson, E., Karczmar, A.G., Padilla, S., Pope, C.N., Richardson, R.J., Saunders, D.R., Sheets, L.P., Sultatos, L.G., Wallace, K.B., 1998. Common mechanism of toxicity: A case study of organophosphorus pesticides. **Toxicological Sciences**, 41; 8-20.
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# **ATTACHMENT 2**



## Letters from Researchers and Citrus Growers Supporting the Use of Aldicarb on Citrus in Florida

The attached 11 letters were submitted in support of the use of aldicarb on citrus in Florida. A few pertinent remarks have been excerpted from each letter. Also see the sworn affidavits that were submitted by these researchers and citrus growers.

**1. Dr. Philip Stansly, Professor Entomology, University Florida IFAS-SWFREC -- 10/16/17**

(Also see the sworn affidavit from Dr. Philip Stansly, dated 5/21/18)

*"There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane."*

**2. Walter T. Jerkins, President, Premier Citrus LLC -- 10/11/17**

(Also see the sworn affidavit from Walter T. Jerkins, dated 5/23/18)

*"Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus."*

**3. John Gose, General Manager, Lykes Bros. Inc -- 10/2/17**

(Also see the sworn affidavit from John Gose, dated 5/17/18)

*"We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops."*

**4. William Roe, Vice President and Chief Operating Officer, Wm. G. Roe & Sons, Inc -- 9/28/17**

(Also see the sworn affidavit from William Roe, dated 4/27/18)

*"As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant*

*and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product."*

**5. Steve Ryan, President, Alico Citrus -- 10/10/17**

(Also see the sworn affidavit from Dave Owens, Director of Chemical Sales, Alico Citrus, dated 5/29/18)

*"As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product."*

**6. Tim Dooley, Vice President and General Manager, Blue Goose Growers LLC – 10/11/17**

(Also see the sworn affidavit from Tim Dooley, dated 5/17/18)

*"Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!"*

**7. Marvin Kahn, Owner, Kahn Citrus Management LLC – 11/3/17**

(Also see the sworn affidavit from Marvin Kahn, dated 5/xx/18)

*"We have had experience using Aldicarb in the past and have witnessed firsthand its positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods."*

**8. Michael Stewart, Manager Horticultural Services, Consolidated Citrus LP – 10/20/17**

(Also see the sworn affidavit from Cody Lastinger, Manager Horticultural Services, Consolidated Citrus LP, dated 5/23/18)

*"I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers*

*who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials."*

**9. John Barden, Vice President, Barben Fruit Company Inc – 10/13/17**

(Also see the sworn affidavit from John Barden, dated 5/30/18)

*"Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid."*

**10. David Howard, Vice President Operations, Graves Brothers Company – 11/3/17**

*"Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control."*

**11. Keith Davis, Owner, Florida Fertilizer Company Inc -- 10/10/17**

*"Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements."*

Southwest Florida Research and Education Center  
2686 State Road 29 North  
Immokalee, FL 34142-9515

239-658-3400  
239-658-3469 Fax  
<http://swfrec.ifas.ufl.edu>

To: Antoine A. Puech, Managing Member, AgLogic Chemical LLC  
From: Dr. Philip A. Stansly, [pstansly@ufl.edu](mailto:pstansly@ufl.edu)  
Cc: Ron Hamel, Gulf Citrus Growers Association  
Date: 16 October 2017  
Subject: Re-registration of aldicarb

Dear Sir,

By means of this memo I would like to express my full support for the re-registration of Aldicarb in citrus. I am a research and extension entomologist working on citrus at this Center since 1989. My appointment is state wide with emphasis of the southwest growing regions which comprises about 25% of total citrus production in the state. During this time I have had considerable experience working with aldicarb, both pre and post greening (HLB) as you can see from the citations below. In my estimation aldicarb is an excellent product both in terms of efficacy as well as environmental and personal safety, thanks to the safeguards and stewardship actually in place.

There is really no product available to citrus growers that does all that aldicarb can do: control sucking insects, rust mites, and nematodes as well as enhance yield in its own right. Its absence from the market would have been a big loss to growers, even before the advent of HLB transmitted by the Asian citrus psyllid (ACP). This disease is responsible for a more than 50% loss in production of Florida citrus, pushing the industry to the brink of annihilation even before Hurricane Irma. However aldicarb was also a key product in the fight against this disease by providing long term systemic control of the ACP vector in bearing trees that no other product available today can deliver. It might not be hyperbole to state that re-registration of aldicarb could make the difference between life and death of Florida's iconic citrus industry. This is especially important now to help trees recover from losses and damage caused by the hurricane. Therefore, I urge that no effort be spared in registering aldicarb again for citrus in Florida and elsewhere in the US wherever citrus is grown. Please feel free to contact me for any additional information with respect to this issue.

Best Regards,

Digitally signed by Phil Stansly  
DN: cn=Phil Stansly, o=UF-IFAS, ou=SWFREC,  
email=pstansly@ufl.edu, c=US  
Date: 2017.10.16 11:58:17 -04'00'

Philip A. Stansly  
Professor of Entomology

**References cited:**

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P.O. BOX 690759  
Vero Beach, FL 32969

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 So Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech;

I am writing this letter with the intent to offer my full support as well as the full support of all of Premier's citrus related companies and clients in Florida for the re-registration of Aldicarb as a restricted use pesticide in Florida.

I currently serve as President of Premier Citrus and Premier Citrus Management, and together these companies have directly managed over 20,000 acres of citrus annually, in seven different Florida counties since 2005. Premier also operates one of the industry's largest fresh fruit packing houses, as well as one of the largest fresh citrus marketing companies. Prior to working with Premier, I managed the state's largest grove management company, Blue Goose Growers all the way back to 1980, including the Dole Citrus activities between 1983 and 2000.

My experience in crop management goes all the way back to 1975, but closer to 1980 when I first became actively involved and responsible for the selection and use of citrus pesticides. Since Aldicarb first became available in Florida, we used the product on practically all of our managed acres at the labeled rate due to the easiest of all metrics to track: higher earnings.

Aldicarb specifically controlled certain insect, mite and nematode pests, but probably more than what was labeled, as its use promoted improved tree health and productivity beyond what one would expect from just the control of those specific pests. Most of Florida's crop managers came to accept this effect as a PGR (plant growth regulator) effect which provided a direct correlation of Aldicarb use and improved health and yield. The yield improvements were easily observed and of course directly drove improved revenues, significantly beyond the cost of the material. Aldicarb was one if not the most clearly cost effective citrus pesticides we've ever had in Florida citrus.

Improved yields were most often a result of improved size, which always carries a premium in the fresh fruit business. That size improvement as well as overall blemish control was easily noticed in the packinghouse and drove more favorable size and quality packages, again driving up revenues for fresh fruit as well as juice fruit.

In fact, the product was so important to our annual production plan that actively participating in complying with the Stewardship program was a high company priority to insure

that by our safe use we could help the registrant keep the product available out into the future. It was a major disappointment when Bayer voluntarily pulled the label in 2010, and we believe strongly that its discontinued use and loss of the PGR and other effects coincided and contributed to both our company and the Florida industry yield decline as the additional pressure of ACP and HLB expanded and has contributed to this day.

Premier's current nucleus of excellent grove managers happen to be the remnants of one of the industry's largest Aldicarb applicators prior to 2010, and we have access to those same machines now. Together with those machines and experienced managers and applicators, Premier could be in the application business as quickly as anyone, as we have the weight of the grove financial base also pushing for this application capability.

The availability of Aldicarb will be a valuable offset to the nagging weak tree health that continues to suffocate our yields. HLB has the Florida industry on its heels, and with the last hurricane, it's fair to say we're desperate to obtain any tools that can even incrementally get us back to improved productivity and revenues to keep us in business.

Please keep up your best effort to obtain a registration by whatever means necessary, and consider Premier a strong supporter willing to help you at every turn.

Thank you for considering our need and our support of your pursuit of the use of Aldicarb for Florida citrus growers.

A handwritten signature in black ink, appearing to read "Walter T. Jerkins, Jr.", with a stylized flourish at the end.

Walter T. Jerkins, Jr.  
President, Premier Citrus, LLC  
625 66th Ave SW, 32968  
Vero Beach, Florida  
Ph: 772-469-1549, Mobile: 772-473-9754

# LYKES BROS. INC.

7 Lykes Road  
Lake Placid, FL 33852-9582



Telephone: (863) 465-4127  
FAX: (863) 465-2289

To: Antoine Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

October 2, 2017

Dear Mr. Puech,

My name is John Gose and I am the General Manager for Lykes Bros. Inc. Our company has been a major player in the citrus industry for many decades now. We have over 6,000 acres of active citrus land with various varieties of oranges for juice. We have been in a war against HLB for many years and time is running out for many growers. Just five short years ago we were at over 16,000 active citrus acres. The loss of over 10,000 acres is a direct result of citrus greening. The need is great to resurrect a product that will help us fight multiple pests as well as promote tree health and growth and increase fruit yields.

As a grower we used aldicarb in the past under the registered name of Temik. We are aware that aldicarb requires precise application and safety requirements and I can assure you we are prepared to follow the stringent program in our groves. The reinstatement of aldicarb in the citrus industry is crucial to our survival. We recently suffered major setback due to Hurricane Irma and that toppled with the constant pressure of Citrus Greening has many growers in a fight to stay in business. We see aldicarb as a critical turning point in the citrus industry and we hope to see it back on the market as it is a proven tool in the fight against psyllids, rust mites, root weevils, nematodes, whiteflies, and aphids. The citrus industry needs this product in order to ensure the success of future crops.

John Gose,

A handwritten signature in black ink, appearing to read 'John Gose'.

General Manager



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Red Deer  
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Blue Lake  
Tru-Tone  
Tru-Type  
Blu-Knight

To: Antoine Puech  
Managing Member AgLogic Chemical LLC  
121 South Estates Drive, Suite 101  
Chapel Hill, NC 27514

From: Bill Roe  
VP Operations Wm. G Roe & Sons Inc.  
Winter Haven, FL 33882

Date: September 28, 2017  
Re: AgLogic 15GG Aldicarb pesticide

Dear Mr Puech:

I am writing this letter in support of the re-registration of Aldicarb as a restricted use pesticide for use on Florida citrus.

Our company Wm G Roe & Sons is a long standing player in the citrus industry in Florida. We own manage or operate approximately 3,000 acres of citrus across various locations throughout the citrus belt. We have a diversified portfolio of varieties which range from Pomelo to Tangerines and our primary business is that of a fresh fruit grower, packer, shipper, and marketer. We are the leading shipper of tangerines in the state of Florida and our brand Noble is highly respected in retail and terminal markets. We had used Aldicarb in the form of Temik for many years during the decades of the 80's, 90's, and 2,000's.

At one point during the 90's we were certified commercial applicators in addition to using it on all of our own acreage for which it could be permitted.

As a fresh fruit packer we recognize Aldicarb's extremely positive impact on the quality of the citrus produced from trees treated with Aldicarb. Not only does its application give the grower significant and lasting mite control, but we know it has a positive impact on the nematode population and causes the tree to elicit a distinguishable PGR effect. The manifestation of this effect is higher and brighter peel color and enhanced sizing. In my 41 years of managing citrus I have not seen any other product which gives both the grower and the handler such a significant advantage over competitors who might not use the product.

We recognize that Aldicarb requires a stringent stewardship program to insure its safe and appropriate application. Florida had implemented a rigorous stewardship program through its Dept of Agriculture during the prior application period which required prior site inspections, well set-backs, and application permits specific to site. For many years this program was successfully administered and has a legacy of providing the industry with a proven tool to enhance tree vigor, yield and fruit quality.

As an industry besieged with disease and recent bad weather luck we sorely need this product for use in our groves to offset the deleterious impacts of Greening.

Sincerely,





October 10, 2017

Antoine Puech  
Managing Member  
Aglogic Chemical LLC  
121 S Estates Drive Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

My name is Steve Ryan and I am the President of Citrus Operations for Alico. Our company grows 32,000 acres of citrus throughout Florida. We currently have 250 full time employees as well as several hundred contract laborers.

We have been battling Huanglongbing, aka citrus greening, for several years and have seen our production decline rapidly as a direct result of this disease. One of our primary weapons against the vectors of this disease was Aldicarb which we used until it was taken off the market in 2010. Now is the time to resurrect this product as a much needed tool in our battle to stop the devastating ravages of this disease.

We at Alico understand that this product requires diligent stewardship activities and are committed to ensuring this product is used in a safe and responsible manner. Our company has experience in using millions of pounds of Aldicarb for over 20 years without incident.

The damage caused by Hurricane Irma has only exacerbated our need to have this product available to us as soon as possible. We appreciate the efforts of Aglogic in bringing this product back to the citrus industry. Alico is committed to assisting you however we can in obtaining regulatory approval. It is crucial we have this tool in our arsenal to combat the ravages of HLB. Aldicarb can be the foundation of our integrated pest management approach and will allow us to reduce the number of foliar insecticide applications.

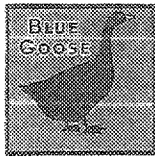
Thank you again for your efforts to get this product reinstated for the citrus industry. It is our sincerest hope that the regulatory agencies will give this the appropriate attention and priority. The urgency of this situation cannot be overstated.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Ryan", is written over a circular stamp.

Steve Ryan  
President

12010 E Hwy 70  
Arcadia, FL 34266



**Blue  
Goose  
Growers**

**Florida Grove and Crop Management L.L.C**

P.O. Box 14709  
Ft Pierce, FL 34979  
Phone (772) 461-3020  
Fax (772) 468-4669

October 11, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S. Estates Dr., Suite 101  
Chapel Hill, NC 27514

**RE: Aldicarb (Temik) Re-Registration**

Dear Mr. Puech:

As General Manager of Blue Goose Growers, a 10,000 acre citrus management company, located on the east coast of Florida, I fully support your effort to re-register Temik for use on citrus in Florida.

As you are aware, our industry is suffering and in need of every available tool to control the spread of citrus greening and make this industry viable again. Allowing Temik to be used again on citrus in Florida will once again allow us to have a familiar product, a product that works, to control the pests that carry diseases that threaten our citrus crops.

Absent better tools, like Temik, citrus greening will continue to challenge our groves, resulting in lower yields, higher costs, and ultimately negative economic returns. Absent better tools citrus growers will be out of business soon!

We all genuinely appreciate your effort to expedite this re-registration effort, and look forward to having Temik available for use.

Sincerely Yours,

  
Timothy J. Dooley  
VP/GM, BGG

## Antoine Puech

---

**From:** Marvin Kahn <mkahn@kahngrove.com>  
**Sent:** Friday, November 03, 2017 3:52 PM  
**To:** Antoine Puech  
**Cc:** mikes@flicitrusmutual.com; Andrew Meadows; Trevor Murphy  
**Subject:** Aldicarb

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Good afternoon Mr. Puech,

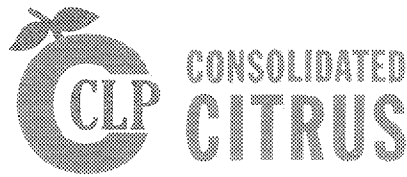
We are a third-generation citrus growing operation, with experience in the industry dating back to the 1930s when my father purchased his first orange grove. We have had experience using Aldicarb in the past and have witnessed firsthand it's positive impact our crop. As you know, our industry is currently battling HLB and can use as many tools as possible to combat this crippling disease. Bringing Aldicarb back to market will give us a powerful tool to help protect our livelihoods. Please let us know if there is anything we can do to assist you in this process.

If you have not heard from the five or so grower organizations CEO's , we or Mike Sparks and Andrew Meadows could help in this regard.

Regards,

Marvin Kahn  
Kahn Citrus Management, LLC  
Murphy Ag Solutions of the Heartland, LLC  
P.O. Box 3346  
Sebring, FL 33871  
863-381-0384 (Cell)  
863-385-6136 (Office)  
863-382-9737 (Fax)





10/20/2017

Michael Stewart, Manager  
Horticultural Services  
Consolidated Citrus LP  
63 Barn Rd.  
Venus, FL 33960

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

In my position as Manager – Horticultural Services for Consolidated Citrus LP, I am writing in support of AgLogic LLC's application to register AgLogic 15GG Aldicarb pesticide for use in citrus in the state of Florida. Consolidated Citrus has nearly 30,000 acres of citrus, making it one of the largest citrus production companies in Florida. I have used Aldicarb, as the branded product Temik, for many years under three different registrants, Union Carbide, Rhone Poulenc and Bayer Crop Science. I was personally involved in intensive, multi-year trials using Temik on highly permeable sandy citrus soils while Rhone Poulenc was the licensed registrant. These trials were designed to detect and quantify any ground water contamination associated with Aldicarb applied to commercial citrus. No aldicarb or its metabolites were detected from ground-water monitoring wells. These trials also were instrumental in establishing the drinking water well set-backs. When Aldicarb is applied in a rigidly prescribed manner, it is a safe and effective pesticide controlling mites, nematodes, aphids and Asian citrus psyllids, while also improving fruit appearance and increasing yields. I strongly suspect that those growers who continued to use Temik until Bayer Crop Science withdrew it from the market, had lower initial rates of HLB, aka citrus greening disease, due to the timing and efficacy of the single allowable Temik application for reducing populations of the HLB vector, the ACP, than those growers who did not use the product. Aldicarb being a soil incorporated systemic pesticide is also very safe for non-target insects and beneficials. If AgLogic 15GG Aldicarb is registered and priced right, Consolidated Citrus would very likely use it for both fresh and processed citrus fruit production. Thank you for your efforts to register this product.

Sincerely yours,

Michael Stewart, Manager  
Horticultural Services

63 Barn Road  
Venus, FL 33960

(p) 863-699-6090  
(f) 863-465-6837



October 13, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech:

Our company has been growing citrus in central Florida since the 1920's. The fifth generation has just joined us and expanded our farming operation to include blueberries. My two brothers and I manage the day to day farming activities personally meaning our boots are in the groves.

I am writing to support AgLogic Chemical LLC to pursue the registration for AgLogic 15GG Aldicarb for use in Florida citrus. For more than 20 years, Aldicarb (brand name Temik) was one of the most effective inputs to manage a broad range of citrus pests systemically in the tree. This resulted in substantial increases in fruit yields and quality as well as improved growth

The grower community is encouraged by your effort to get an Aldicarb product again registered in Florida citrus. Right now, growers are in the fight of their life against a disease known as HLB, or citrus greening. HLB is a vascular disease vectored by the Asian citrus psyllid (ACP). It is endemic to the state of Florida and it can kill a tree within two years. Our crop has shrunk by more than 66 percent since the onset of HLB.

No cure exists although a massive research effort over the past decade has made headway. Adding Aldicarb back to the toolbox will help slow the spread of the disease through an effective integrated management program. When Temik was registered in Florida citrus, growers followed an intensive stewardship program regulated at both the state and federal level. All application sites were monitored prior to the start of the approved application period. All wells at each site were identified, located, and flagged with a setback. The program clearly showed that Aldicarb can be used safely.

Aldicarb had been used for more than two decades to manage citrus psyllids, rust mites, whiteflies, nematodes, and brown aphids. We need it back in the toolbox more than ever. It will provide a critical asset to fight HLB and the Asian Citrus Psyllid.

Regards,

A handwritten signature in dark ink, appearing to read "John P. Barben".

John P. Barben  
VP, Robert J. Barben, Inc.  
VP, Barben Fruit Co., Inc.



November 3, 2017

Antoine A Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

Dear Mr. Puech,

I am writing this letter to offer my support, and the support of Graves Brothers Company, in the pursuit of re-registration of Aldicarb as a restricted use pesticide on Florida citrus.

Having been raised in Central Florida while working on family owned citrus properties, and as a graduate of The University of Florida Citrus Horticulture Program, I feel that my 30 years of citrus production experience qualifies me to encourage the return of Aldicarb (AgLogic 15GG) pesticide to the Florida Citrus Industry.

I currently manage the agricultural properties owned by Graves Brothers Company. GBC has been involved in Florida agriculture since the 1930's and currently owns and manages 9,000 acres of cattle, timber, vegetable, ornamental and citrus production in Florida. Over the last 70 years Graves Brothers Company has been heavily focused on all phases of the Florida Citrus Industry from nursery tree production through citrus harvesting, packing and sales.

We are struggling, as is the entire Florida Citrus Industry, with the bacterial disease Huanglongbing and its associated vector Asian Citrus Psyllid. The reduction in tree health brought on by this imported disease and its introduced vector has placed our entire industry on the precipice of collapse. Our industry is desperately in need of tools to combat this endemic disease.

Until its removal from the Florida citrus market in 2010, Graves Brothers Company had included Aldicarb as a cornerstone product in our annual farming production plans. Following its initial usage in the late 1980's we recognized the benefits of a product that excelled at consistent mite and nematode control, measurable fruit quality and yield increases as well as plant growth response in newly planted young trees. Currently there is no product in our miticide and nematocide portfolio that offers the significant length of pest control along with these other attributes. We desperately need products with this mode of action to help prevent pesticide resistance brought on by overuse of the limited number of current chemistries available for psyllid, mite and nematode control.

It is my understanding that Ag Logic 15GG will be labeled for application and use by the same Florida Rule (Rule 5E2.028) as in the past. The history of stewardship of Aldicarb by Florida Citrus Growers under these guidelines has proven that this product can be used safely and without any unacceptable environmental risk. The cadre of growers and applicators that were part of this successful history are more than capable of continuing this legacy in Florida citrus.

Please consider the needs of Graves Brothers Company and more specifically the needs of The Florida Citrus Industry as you endeavor to return this important tool to our diminished grower toolbox.

Sincerely,

David F Howard  
Vice President of Operations  
Graves Brothers Company  
2770 Indian River Boulevard, Suite 201  
Vero Beach, Florida  
Phone: 772.562.3886, Mobile: 772.473 9622

2770 Indian River Blvd; Suite 201, Vero Beach, Florida 32960-4230  
Phone (772) 562-3886 Fax (772) 562-3565  
[www://GravesBrothersCompany.com](http://www.GravesBrothersCompany.com)

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# FLORIDA FERTILIZER COMPANY, INC.

P.O. BOX 1087 • WAUCHULA, FL 33873-1087  
(863) 773-4159 • FAX # (863) 773-9363  
office@flfertilizer.com

October 10, 2017

Antoine A. Puech  
Managing Member  
AgLogic Chemical, LLC  
121 S Estates Dr., Suite 101  
Chapel Hill, NC 27514

My name is Keith Davis. I am a citrus grower, fertilizer and agricultural chemical supplier. I own approximately 175 acres of citrus, and make recommendations for many customers in the citrus industry.

I strongly support AgLogic efforts to register AgLogic 15GG for use on citrus in the state of Florida. As a citrus grower and chemical supplier, with almost 40 years of experience, I have seen firsthand what Aldicarb does for a citrus tree. Aldicarb makes it "Healthy"! Why? It reduces nematodes on the roots, and controls piercing and sucking insects. Aldicarb also increases pound solids of fruit, enables it to handle stress from cold weather, and should help trees survive and be able to withstand the effects of citrus greening (HLB) bacteria.

Aldicarb in the past has proven itself to help the grower get resets into production faster, saving him many trips through the grove. It should also help protect the flush from the Asian Citrus Psyllid the vector for HLB. We have a nematode problem and don't have an economical way to control them. Aldicarb has proven effective on citrus nematodes. I have seen nematode samples lately that are very high in population which causes a decline in production. Aldicarb is incorporated into the soil with precision equipment, and applied safely with no harm to the environment or worker exposure. Aldicarb has a stewardship program to track it through the channels to make sure it is applied as per label requirements.

AgLogic 15GG would be a great product to have for Florida citrus, to keep this great industry strong and viable.

Sincerely,



Keith Davis





Message

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**From:** Keller, Kaitlin [keller.kaitlin@epa.gov]  
**Sent:** 3/12/2019 5:48:41 PM  
**To:** Dunn, Alexandra [dunn.alexandra@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Baptist, Erik [Baptist.Erik@epa.gov]  
**Subject:** FW: Pending Dicamba 24(c)'s  
**Attachments:** Dicamba SLN List; 2019.docx

## Deliberative Process / Ex. 5

**From:** Keller, Kaitlin  
**Sent:** Thursday, March 07, 2019 4:02 PM  
**To:** Erik Baptist (baptist.erik@epa.gov) <baptist.erik@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>  
**Subject:** FW: Pending Dicamba 24(c)'s

## Deliberative Process / Ex. 5

Thanks,  
Kaitlin

**From:** Keigwin, Richard  
**Sent:** Thursday, March 07, 2019 6:46 AM  
**To:** Keller, Kaitlin <keller.kaitlin@epa.gov>  
**Cc:** Dinkins, Darlene <Dinkins.Darlene@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Miller, Wynne <Miller.Wynne@epa.gov>  
**Subject:** Pending Dicamba 24(c)'s

## Deliberative Process / Ex. 5

DICAMBA 24(c)s; 2019							
SLN Reg. No.	State Issued Date	Status (EPA Response Date)	EPA Reg. No.	Product Name	Company Name	Active Ingredient	SLN Use
NC180004	11/19/18	Pending (90-days; 2/24/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	NC specific training language for dicamba-tolerant cotton/soybeans
NC180005	11/14/18	Pending (90-days; 2/17/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	NC specific training language for dicamba-tolerant cotton/soybeans
NC180006	11/21/18	Pending (90-days; 2/24/19)	352-913	Dupont Fexapan	Dupont	Diglycolamine salt of dicamba	NC specific training language for dicamba-tolerant cotton/soybeans
IA190001	12/10/18	Pending (90-days; 3/11/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	IA specific training language for dicamba-tolerant soybeans
IA190002	12/10/18	Pending (90-days; 3/11/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	IA specific training language for dicamba-tolerant soybeans
IA190003	12/11/18	Pending (90-days; 3/13/19)	352-913	Dupont Fexapan	Dupont	Diglycolamine salt of dicamba	IA specific training language for dicamba-tolerant soybeans
SD190001	12/7/18	Pending (90-days; 3/17/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	Addition of June 30 cut-off date for dicamba-tolerant soybeans
SD190002	12/7/18	Pending (90-days; 3/17/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	Addition of June 30 cut-off date for dicamba-tolerant soybeans
SD190003	12/7/18	Pending (90-days; 3/17/19)	352-913	Dupont Fexapan	Dupont	BAPMA salt of dicamba	Addition of June 30 cut-off date for dicamba-tolerant soybeans
MN190001	1/28/19	Pending (90-days; 5/1/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	<ol style="list-style-type: none"> <li>1. CUTOFF DATE: DO NOT apply after June 20, 2019</li> <li>2. Removes temperature cutoff restriction</li> <li>3. Restricted Use Pesticide clarification</li> </ol>
MN190002	1/28/19	Pending (90-days; 5/1/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	<ol style="list-style-type: none"> <li>1. CUTOFF DATE: Use of Engenia in dicamba-</li> </ol>

DICAMBA 24(c)s; 2019							
SLN Reg. No.	State Issued Date	Status (EPA Response Date)	EPA Reg. No.	Product Name	Company Name	Active Ingredient	SLN Use
							tolerant soybeans is prohibited after June 20, 2019 2. Removes temperature cutoff restriction 3. Restricted Use Pesticide clarification
MN190003	1/28/19	Pending (90-days; 5/1/19)	352-913	Dupont Fexapan	Dupont	BAPMA salt of dicamba	1. CUTOFF DATE: DO NOT apply after June 20, 2019 2. Removes temperature cutoff restriction 3. Restricted Use Pesticide clarification
ND190001	1/28/19	Pending (90-days; 5/1/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	CUTOFF DATE: DO NOT apply this product in dicamba tolerant soybeans after either June 30, 45 days after planting, or R1 (beginning bloom), whichever comes first
ND190002	1/28/19	Pending (90-days; 5/1/19)	7969-913	Engenia	BASF	BAPMA salt of dicamba	Application Cutoff Date: In dicamba-tolerant soybeans, DO NOT apply Engenia later than June 30, 45 days after planting, or R1 (beginning bloom), whichever comes first
ND190003	1/28/19	Pending (90-days; 5/1/19)	352-913	Dupont Fexapan	Dupont	BAPMA salt of dicamba	DO NOT apply DuPont FeXapan herbicide Plus VaporGrip Technology later than June 30, 45 days after planting, or after the first bloom (R1 growth phase), whichever comes first.



Message

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**From:** Keller, Kaitlin [keller.kaitlin@epa.gov]  
**Sent:** 3/7/2019 9:01:50 PM  
**To:** Baptist, Erik [Baptist.Erik@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]  
**Subject:** FW: Pending Dicamba 24(c)'s  
**Attachments:** Dicamba SLN List; 2019.docx

# Deliberative Process / Ex. 5

Thanks,  
Kaitlin

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**From:** Keigwin, Richard  
**Sent:** Thursday, March 07, 2019 6:46 AM  
**To:** Keller, Kaitlin <keller.kaitlin@epa.gov>  
**Cc:** Dinkins, Darlene <Dinkins.Darlene@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Miller, Wynne <Miller.Wynne@epa.gov>  
**Subject:** Pending Dicamba 24(c)'s

# Deliberative Process / Ex. 5

DICAMBA 24(c)s; 2019							
SLN Reg. No.	State Issued Date	Status (EPA Response Date)	EPA Reg. No.	Product Name	Company Name	Active Ingredient	SLN Use
NC180004	11/19/18	Pending (90-days; 2/24/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	NC specific training language for dicamba-tolerant cotton/soybeans
NC180005	11/14/18	Pending (90-days; 2/17/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	NC specific training language for dicamba-tolerant cotton/soybeans
NC180006	11/21/18	Pending (90-days; 2/24/19)	352-913	Dupont Fexapan	Dupont	Diglycolamine salt of dicamba	NC specific training language for dicamba-tolerant cotton/soybeans
IA190001	12/10/18	Pending (90-days; 3/11/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	IA specific training language for dicamba-tolerant soybeans
IA190002	12/10/18	Pending (90-days; 3/11/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	IA specific training language for dicamba-tolerant soybeans
IA190003	12/11/18	Pending (90-days; 3/13/19)	352-913	Dupont Fexapan	Dupont	Diglycolamine salt of dicamba	IA specific training language for dicamba-tolerant soybeans
SD190001	12/7/18	Pending (90-days; 3/17/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	Addition of June 30 cut-off date for dicamba-tolerant soybeans
SD190002	12/7/18	Pending (90-days; 3/17/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	Addition of June 30 cut-off date for dicamba-tolerant soybeans
SD190003	12/7/18	Pending (90-days; 3/17/19)	352-913	Dupont Fexapan	Dupont	BAPMA salt of dicamba	Addition of June 30 cut-off date for dicamba-tolerant soybeans
MN190001	1/28/19	Pending (90-days; 5/1/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	<ol style="list-style-type: none"> <li>1. CUTOFF DATE: DO NOT apply after June 20, 2019</li> <li>2. Removes temperature cutoff restriction</li> <li>3. Restricted Use Pesticide clarification</li> </ol>
MN190002	1/28/19	Pending (90-days; 5/1/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	<ol style="list-style-type: none"> <li>1. CUTOFF DATE: Use of Engenia in dicamba-</li> </ol>

DICAMBA 24(c)s; 2019							
SLN Reg. No.	State Issued Date	Status (EPA Response Date)	EPA Reg. No.	Product Name	Company Name	Active Ingredient	SLN Use
							tolerant soybeans is prohibited after June 20, 2019 2. Removes temperature cutoff restriction 3. Restricted Use Pesticide clarification
MN190003	1/28/19	Pending (90-days; 5/1/19)	352-913	Dupont Fexapan	Dupont	BAPMA salt of dicamba	1. CUTOFF DATE: DO NOT apply after June 20, 2019 2. Removes temperature cutoff restriction 3. Restricted Use Pesticide clarification
ND190001	1/28/19	Pending (90-days; 5/1/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	CUTOFF DATE: DO NOT apply this product in dicamba tolerant soybeans after either June 30, 45 days after planting, or R1 (beginning bloom), whichever comes first
ND190002	1/28/19	Pending (90-days; 5/1/19)	7969-913	Engenia	BASF	BAPMA salt of dicamba	Application Cutoff Date: In dicamba-tolerant soybeans, DO NOT apply Engenia later than June 30, 45 days after planting, or R1 (beginning bloom), whichever comes first
ND190003	1/28/19	Pending (90-days; 5/1/19)	352-913	Dupont Fexapan	Dupont	BAPMA salt of dicamba	DO NOT apply DuPont FeXapan herbicide Plus VaporGrip Technology later than June 30, 45 days after planting, or after the first bloom (R1 growth phase), whichever comes first.





Message

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**From:** Bertrand, Charlotte [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=F044D768E05842E1B75321FF6010E1B8-BERTRAND, CHARLOTTE]  
**Sent:** 8/14/2018 10:59:10 PM  
**To:** Keller, Kaitlin [keller.kaitlin@epa.gov]; Messina, Edward [Messina.Edward@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Baptist, Erik [baptist.erik@epa.gov]  
**Subject:** Aldicarb SLN 8-6-2018 revised after meeting with AgLogic\_clean.doc  
**Attachments:** Aldicarb SLN 8-6-2018 revised after meeting with AgLogic\_clean.doc

A few extra comments in the same document Erik commented in. Thanks!

Message

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**From:** Keigwin, Richard [Keigwin.Richard@epa.gov]  
**Sent:** 3/13/2019 1:36:35 PM  
**To:** Dunn, Alexandra [dunn.alexandra@epa.gov]  
**Subject:** RE: IL and Dicamba  
**Attachments:** Dicamba SLN List; 2019 tsm.docx

Here's the list as of this morning.

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**From:** Dunn, Alexandra  
**Sent:** Wednesday, March 13, 2019 9:36 AM  
**To:** Keigwin, Richard <Keigwin.Richard@epa.gov>  
**Subject:** Re: IL and Dicamba

Let's get a list of all of these please

Alexandra Dapolito Dunn, Esq.  
Assistant Administrator  
Office of Chemical Safety & Pollution Prevention  
U.S. Environmental Protection Agency  
Washington, DC

Sent from my iPhone

On Mar 13, 2019, at 9:21 AM, Keigwin, Richard <[Keigwin.Richard@epa.gov](mailto:Keigwin.Richard@epa.gov)> wrote:

Illinois is seeking 24(c)'s for dicamba that would add the following additional restrictions/label clarifications:

- **Cutoff date** – DO NOT apply this product after June 30, 2019.
- **Wind/Residential areas** – DO NOT apply when the wind is blowing towards neighboring residential areas, as stated on the Engenia container label.
- **Fieldwatch Registry** - Before making an application, the applicator must consult the Field Watch sensitive crop registry and comply with all associated record keeping label requirements listed on the Engenia container label.
- **Buffer** - The applicator must maintain a 110-foot downwind buffer between the last treated row and the nearest downfield edge of any Illinois Mature Preserve Commission Site.
- **Wind/Sensitive Crops** - It is best to apply when wind is blowing away from sensitive areas which include but not limited to bodies of water and nonresidential, uncultivated areas that may harbor sensitive plant species.

The 90-day review date for these requests ends on 6/3/19.

DICAMBA 24(c)s; 2019							
SLN Reg. No.	State Issued Date	Status (EPA Response Date)	EPA Reg. No.	Product Name	Company Name	Active Ingredient	SLN Use
NC180004	11/19/18	Pending (90-days; 2/24/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	NC specific training language for dicamba-tolerant cotton/soybeans
NC180005	11/14/18	Pending (90-days; 2/17/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	NC specific training language for dicamba-tolerant cotton/soybeans
NC180006	11/21/18	Pending (90-days; 2/24/19)	352-913	Dupont Fexapan	Dupont	Diglycolamine salt of dicamba	NC specific training language for dicamba-tolerant cotton/soybeans
IA190001	12/10/18	Pending (90-days; 3/11/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	IA specific training language for dicamba-tolerant soybeans
IA190002	12/10/18	Pending (90-days; 3/11/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	IA specific training language for dicamba-tolerant soybeans
IA190003	12/11/18	Pending (90-days; 3/13/19)	352-913	Dupont Fexapan	Dupont	Diglycolamine salt of dicamba	IA specific training language for dicamba-tolerant soybeans
SD190001	12/7/18	Pending (90-days; 3/17/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	Cutoff Date: DO NOT apply this product in dicamba tolerant soybeans after either June 30, 45 days after planting, or R1 (beginning bloom), whichever comes first.
SD190002	12/7/18	Pending (90-days; 3/17/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	Application Cutoff Date: In dicamba-tolerant soybeans, DO NOT apply Engenia later than June 30; 45 days after planting; or R1 (beginning bloom), whichever comes first.
SD190003	12/7/18	Pending (90-days; 3/17/19)	352-913	Dupont Fexapan	Dupont	BAPMA salt of dicamba	Application Window Restrictions: DO NOT apply after June 30, after R1 growth stage or later than 45 days after planting, whichever comes first.
MN190001	1/28/19	Pending (90-days; 5/1/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	CUTOFF DATE: DO NOT apply after June 20, 2019
MN190002	1/28/19	Pending (90-days; 5/1/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	CUTOFF DATE: Use of Engenia in dicamba-tolerant soybeans is prohibited after June 20, 2019

DICAMBA 24(c)s; 2019							
SLN Reg. No.	State Issued Date	Status (EPA Response Date)	EPA Reg. No.	Product Name	Company Name	Active Ingredient	SLN Use
MN190003	1/28/19	Pending (90-days; 5/1/19)	352-913	Dupont Fexapan	Dupont	BAPMA salt of dicamba	CUTOFF DATE: DO NOT apply after June 20, 2019.
ND190001	1/28/19	Pending (90-days; 5/1/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	CUTOFF DATE: DO NOT apply this product in dicamba tolerant soybeans after either June 30; 45 days after planting; or R1 (beginning bloom), whichever comes first.
ND190002	1/28/19	Pending (90-days; 5/1/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	Application Cutoff Date: In dicamba-tolerant soybeans, DO NOT apply Engenia later than June 30, 45 days after planting, or R1 (beginning bloom), whichever comes first.
ND190003	1/28/19	Pending (90-days; 5/1/19)	352-913	Dupont Fexapan	Dupont	BAPMA salt of dicamba	DO NOT apply DuPont FeXapan herbicide Plus VaporGrip Technology later than June 30, 45 days after planting, or after the first bloom (R1 growth phase), whichever comes first.
IL190001	2/28/19	Pending (90-days; 5/29/19)	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	<u>Note: IL190001 &amp; IL190002 have the same labeling language:</u> <ul style="list-style-type: none"> <li>Do not apply this product after June 30, 2019.</li> <li>Do not apply this product when the wind is blowing toward adjacent residential areas.</li> <li>Before making an application of this product, the applicator must consult the Field Watch sensitive crop registry and comply with all associated record keeping label requirements.</li> <li>The applicator must maintain a 110-foot downwind buffer (when applying up to 22 fluid ounces of this product per acre) or a 220-foot downwind buffer (when applying greater than 22 to 44 fluid ounces of this product per acre) between the last treated row and the nearest downfield edge of any Illinois Mature Preserve Commission Site.</li> </ul>
IL190002	2/28/19	Pending (90-days; 6/3/19)	352-913	Dupont Fexapan	Dupont	BAPMA salt of dicamba	

**DICAMBA 24(c)s; 2019**

SLN Reg. No.	State Issued Date	Status (EPA Response Date)	EPA Reg. No.	Product Name	Company Name	Active Ingredient	SLN Use
							<ul style="list-style-type: none"> <li>It is best to apply when wind is blowing away from sensitive areas which include but not limited to bodies of water and nonresidential, uncultivated areas that may harbor sensitive plant species. (as stated on the Engenia container label added for the IL190003)</li> </ul>
<b>IL190003</b>	2/28/19	Pending (90-days; 6/3/19)	7969-345	Engenia	BASF	BAPMA salt of dicamba	<ul style="list-style-type: none"> <li><b>Cutoff date</b> – DO NOT apply this product after June 30, 2019.</li> <li><b>Wind/Residential areas</b> – DO NOT apply when the wind is blowing towards neighboring residential areas, as stated on the Engenia container label.</li> <li><b>Fieldwatch Registry</b> - Before making an application, the applicator must consult the Field Watch sensitive crop registry and comply with all associated record keeping label requirements listed on the Engenia container label.</li> <li><b>Buffer</b> - The applicator must maintain a 110-foot downwind buffer between the last treated row and the nearest downfield edge of any Illinois Mature Preserve Commission Site.</li> <li><b>Wind/Sensitive Crops</b> - It is best to apply when wind is blowing away from sensitive areas which include but not limited to bodies of water and nonresidential, uncultivated areas that may harbor sensitive plant species.</li> </ul>
<b>GA190001</b>	3/3/19	EPA has not received GA190001 as of 3/12/19	524-617	Xtendimax	Monsanto	Diglycolamine salt of dicamba	<ul style="list-style-type: none"> <li>Required training, Using Pesticides Wisely, to facilitate on-target pesticide application.</li> <li>Addition of two new application methods Row middle, on-the-ground hooded sprays and layby directed sprays to provide additional safeguards for mitigating off-target movement</li> </ul>











Message

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**From:** Rosenblatt, Daniel [Rosenblatt.Dan@epa.gov]  
**Sent:** 6/28/2016 9:12:24 PM  
**To:** Layne, Arnold [Layne.Arnold@epa.gov]  
**CC:** Lewis, Susan [Lewis.Susan@epa.gov]; Jennings, Susan [Jennings.Susan@epa.gov]  
**Subject:** submission history - Puerto Rico - 18's and 24-c's

Hi Arnold – as follow to yesterday's meeting with Jim Jones on the regulatory actions from Puerto Rico – here's information from the data base about requests they have made under FIFRA 24-c. This is presented chronologically from 2011 – 2016. You indicated that Jim was interested in their actions for section 18s. However, it turns out that Puerto Rico has not been active on the emergency exemption front. And the most recent indication of any submissions for emergency use from Puerto Rico date back all the way to 1994. I thought that was going too far back into the past to be germane to any current discussions with their Secretary of Agriculture. However, I can forward that list if you'd like to see it. Let us know though if you have questions on this or ideas for additional research. Dan

SLN #	Product Name	Active Ingredient	Status
PR110001	MIDASH FORTE INSECTICIDE	Imidacloprid	Registered (14-Sep-2011)
PR110002	DUPONT ASSURE II HERBICIDE	Quizalofop-p-ethyl	Registered (03-Nov-2011)
PR130001	ABACUS AGRICULTURAL MITICIDE/INSECTICIDE	Abamectin	Registered (26-Nov-2014)
PR150001	OVOCONTROL P	Nicarbazin	Registered (18-May-2015)
PR150002	WARRIOR II WITH ZEON TECHNOLOGY	lambda-Cyhalothrin	Registered (31-Aug-2015)
PR160001	MARATHON 1% GRANULAR GREENHOUSE AND NURSERY INSECTICIDE	Imidacloprid	Registered (27-Apr-2016)

PR160002	PROCLAIM INSECTICIDE	Emamectin benzoate	Under Review (20-Apr-2016)
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Message

**From:** Layne, Arnold [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=83398E5D5E614599A1A7DE6D13E7448B-LAYNE, ARNOLD]  
**Sent:** 6/30/2016 7:04:23 PM  
**To:** Mojica, Andrea [Mojica.andrea@epa.gov]  
**CC:** Keigwin, Richard [Keigwin.Richard@epa.gov]; Lewis, Susan [Lewis.Susan@epa.gov]; Rosenblatt, Daniel [Rosenblatt.Dan@epa.gov]; Dinkins, Darlene [Dinkins.Darlene@epa.gov]  
**Subject:** Puerto Rico Sect 18s and 24-Cs

Hi Andrea,

Regulatory actions from Puerto Rico – here's information from the data base about requests they have made under FIFRA 24-c. This is presented chronologically from 2011 – 2016. You indicated that Jim was interested in their actions for section 18s. However, it turns out that Puerto Rico has not been active on the emergency exemption front. And the most recent indication of any submissions for emergency use from Puerto Rico date back all the way to 1994.

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PR160002	PROCLAIM INSECTICIDE	Emamectin benzoate	Under Review (20-Apr-2016)
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Message

**From:** Layne, Arnold [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=83398E5D5E614599A1A7DE6D13E7448B-LAYNE, ARNOLD]  
**Sent:** 6/30/2016 12:03:07 PM  
**To:** Miller, Wynne [Miller.Wynne@epa.gov]  
**Subject:** FW: submission history - Puerto Rico - 18's and 24-c's

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**From:** Rosenblatt, Daniel  
**Sent:** Tuesday, June 28, 2016 5:12 PM  
**To:** Layne, Arnold <Layne.Arnold@epa.gov>  
**Cc:** Lewis, Susan <Lewis.Susan@epa.gov>; Jennings, Susan <Jennings.Susan@epa.gov>  
**Subject:** submission history - Puerto Rico - 18's and 24-c's

Hi Arnold – as follow to yesterday's meeting with Jim Jones on the regulatory actions from Puerto Rico – here's information from the data base about requests they have made under FIFRA 24-c. This is presented chronologically from 2011 – 2016. You indicated that Jim was interested in their actions for section 18s. However, it turns out that Puerto Rico has not been active on the emergency exemption front. And the most recent indication of any submissions for emergency use from Puerto Rico date back all the way to 1994. I thought that was going too far back into the past to be germane to any current discussions with their Secretary of Agriculture. However, I can forward that list if you'd like to see it. Let us know though if you have questions on this or ideas for additional research. Dan

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PR160002	PROCLAIM INSECTICIDE	Emamectin benzoate	Under Review (20-Apr-2016)